Office of Rates Management
Washington Department of Social and Health Services

Medicaid Nursing Facility Payment System: Impacts of Case Mix Methodology to Access, Quality of Care and Quality of Life For Nursing Facility Residents
Second Interim Report

July 2003

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I. Forward

Purpose and Background of the Study

Section 18(2), Chapter 8, Laws of 2001, 1st sp. s. requires the Department of Social and Health Services to contract with an independent and recognized organization to study and evaluate the impacts of case mix Medicaid payment implementation on access, quality of care and quality of life for nursing facility residents, and the wage and benefit levels of all nursing facility employees.

The Aging and Disability Services Administration (ADSA) within the Department of Social and Health Services (DSHS) contracted with Myers and Stauffer LC to complete the required study. This is a continuation of a contract with Myers and Stauffer that began in April 2000 and was to have concluded with delivery of a final report on December 1, 2001. The previous study established a baseline of data for the period from January 1, 1998 through June 30, 1998 (prior to case mix payment implementation) and compared it to data for the period from January 1, 2000 through June 30, 2000 (following case mix payment implementation).

However, the case mix payment methodology implemented effective October 1, 1998 included a "hold harmless" provision intended to minimize any negative impact of the methodology. Under this provision, facilities with a case mix adjusted direct care rate component lower than the equivalent nursing services rate (based on the designated rate period inflated forward) would be "held harmless," or paid the nursing services rate.

Because of the "hold harmless" provision in the case mix payment methodology, only eighteen facilities, having consistent ownership, received a case mix rate in all rate periods within the original baseline and comparison time periods. Analysis of data collected on this limited number of facilities could not be conclusive, begging further study and evaluation.

As the hold harmless provision expired on July 1, 2002, the legislature determined that the study should be continued. This would allow more facilities to operate under case mix established payment and to report the resulting operational impacts on cost reports ending December 31, 2002.

The first interim report under this extended study was delivered on October 1, 2002. This is the second interim report and includes summary information from the prior reports and some preliminary analysis. As the December 31, 2002 cost reports data was not available during the development of this interim report, a significant amount of the anticipated analyses is yet to be completed. Given this data restriction, conclusions and any recommendations will be reserved for the final report to be provided on October 1, 2003.

About Myers and Stauffer LC

Myers and Stauffer LC, a nationally based accounting firm, specializes in health care consulting. We have consulted on payment issues for long term care facilities, home health agencies, hospitals, federally qualified health centers, rural health clinics and pharmacy providers for Medicaid programs in 35 states.

Myers and Stauffer is at the forefront of developing and implementing the case mix payment approach, which is used in Washington. Our staff has assisted in the development of case mix payment systems for the states of Kansas, Pennsylvania, Indiana, Idaho, Colorado, Montana, Kentucky, Iowa, and Louisiana. Also, the firm has consulted in the states of Hawaii, Georgia, North Dakota, New Hampshire, Nevada and North Carolina on case mix-related issues. Myers and Stauffer developed the Minimum Data Set (MDS) manual for swing bed providers and training material for the reduced-burden prospective payment form (MPAF) and updated the Resident Assessment Instrument (RAI) manual for the Centers for Medicare and Medicaid Services (CMS).

II. Executive Summary

Because of the broad language in Medicaid, each state has developed its own unique payment methodology. These payment systems are complex and stakeholder goals may sometimes be conflicting. Although, a given payment methodology cannot address all issues or solve all problems, systems should be developed to attain as many goals and objectives as possible.

Reimbursement systems have ranged from simple systems such as a statewide flat rate to more complex methodologies such as a case mix adjusted cost based system. The new payment methodology implemented in Washington has a case mix component that links the care needs of the individuals to the cost of that care and to the resulting rate the facility receives. The system should result in a reasonable linkage among resident case mix, facility access, payment rates and quality of care.

The new payment methodology is cost based and has been re-based periodically. It is important to the evaluation of the system to understand the cost experience from years prior to the implementation of the case mix system as well as any changes seen since statewide implementation.

To better understand how program dollars are spent and the relationship among expenditures, nurse staffing levels (represented in hours of care per resident day) and quality of care, we will evaluate the data reported by facilities on the nursing facility cost report.

This second interim report discusses the development and expansion of the analyses database now containing cost report data from 1994 to 2001. The 2002 cost report data, needed to complete the study, will continue to be collected and analyzed as it becomes available. This report also includes a description of other data still to be collected, including the follow-up or new stakeholder evaluations, additional wage and benefit information and more economic data. We anticipate completing all data collection by the end of August 2003.

This report compares total to routine revenue and evaluates the distribution of various payer sources. It compares changes in revenue and the volume of resident days. It evaluates direct care hours and costs and includes a quartile analysis of the relationship between per diem hours of direct care services and the facility average case mix indices. It compares total direct care services to in house direct care services. It also looks at cost report components that may be indirectly impacted by case mix: administration, operations and support services. A quarterly rate history compares increases in average rate to rates trended forward based on an annual inflation rate of three per cent.

Once data collection is completed, including data from the 12/31/02 cost reports, the results of the follow-up interviews, facility survey data on wages and benefits, and national and state labor statistics, the final report will be provided. This report, due October 1, 2003 will detail all data collection efforts, analyses performed, our findings, conclusions and any recommendations.

III. Introduction

Throughout the legislative history of Medicaid, Congressional intent has been to allow states to develop payment methodologies appropriate for their unique blend of political, cultural, and legal environments. The resulting system design is an accumulation of decisions to a large number of policy options or choices based on knowledge of factors that affect reimbursement, an analysis of current conditions and an understanding of the state's goals and objectives.

Because of the broad language in Medicaid, each state has developed its own unique payment methodology. Reimbursement systems have ranged from simple systems such as a statewide flat rate to more complex methodologies such as a case mix adjusted cost based system.

Payment systems can either be facility independent or facility dependent. Systems that are independent of a particular facility's cost are called flat rate or pricing systems. The flat rates or prices may be based on a variety of factors, such as the average median cost per day of all facilities in the state or subgroup and are only slightly influenced by a particular facility's actual cost experience. The facility is reimbursed at the established price regardless of their cost experience.

Since a major goal is to get the most out of taxpayer dollars entrusted to the state, an advantage of a flat rate or pricing system is that it provides incentives for nursing facilities to control costs. Also, the state is better able to forecast its future expenditures. However, without the addition of incentive payments, these systems lack the ability to reward and ensure quality care.

At the present time, most states use a facility-dependent payment system. A common feature is that the payment to each nursing facility is linked in some way to that facility's particular costs. Many of these reimbursement systems are prospective so that past costs trended forward can be used to set future payment rates. They incorporate various upper limits and incentives. The rates for most of these systems are based on the costs from the latest cost report submitted by the provider.

As discussed in the first interim report, many states have incorporated a case mix adjustment into their rate setting methodology. This case mix payment bases a portion of the per diem rate on the projected care needs and the estimated cost of caring for different types of residents. While case mix reimbursement should make providers indifferent to a resident's severity of impairment and care needs thereby improving access to care, it also has the potential to create perverse financial incentives, such as foregoing resident rehabilitation in order to maintain higher reimbursement, misreporting resident conditions and problems in order to receive higher reimbursement or accepting

sicker residents but providing them no more care than provided to less sick residents. (Cortes, L. MD and Morrow, A. MS).

The new payment methodology implemented in Washington is cost based and has been re-based periodically. It is important to the evaluation to understand the cost experience from years prior to the implementation of the case mix system as well as any changes seen since statewide implementation.

Has the change in the payment rates caused a change in the revenue stream to the facility? Has the percent of Medicaid reimbursement changed with the implementation of case mix? Are costs being shifted to private pay? Is there more reliance on non-routine sources of revenue? Has there been a change in the hours of service provided? If so, is that change linked to the facility's average case mix index? Is there a change in the spending patterns for direct services? Has there been a shifting in cost allocation or identification? Has there been a shift of spending patterns? Do shifts identified in spending patterns link to survey findings or quality measures?

The following interim report lays the groundwork to be used in the final report to answer these questions, as well as complete additional analyses described in the study outline.

Payment systems are complex and stakeholder goals may sometimes be conflicting. The payment methodology cannot address all issues or solve all problems, but should be developed to attain as many goals and objectives as possible. The system should result in a reasonable linkage among resident case mix, facility access, payment rates and quality of care.

IV. Data Collection Efforts

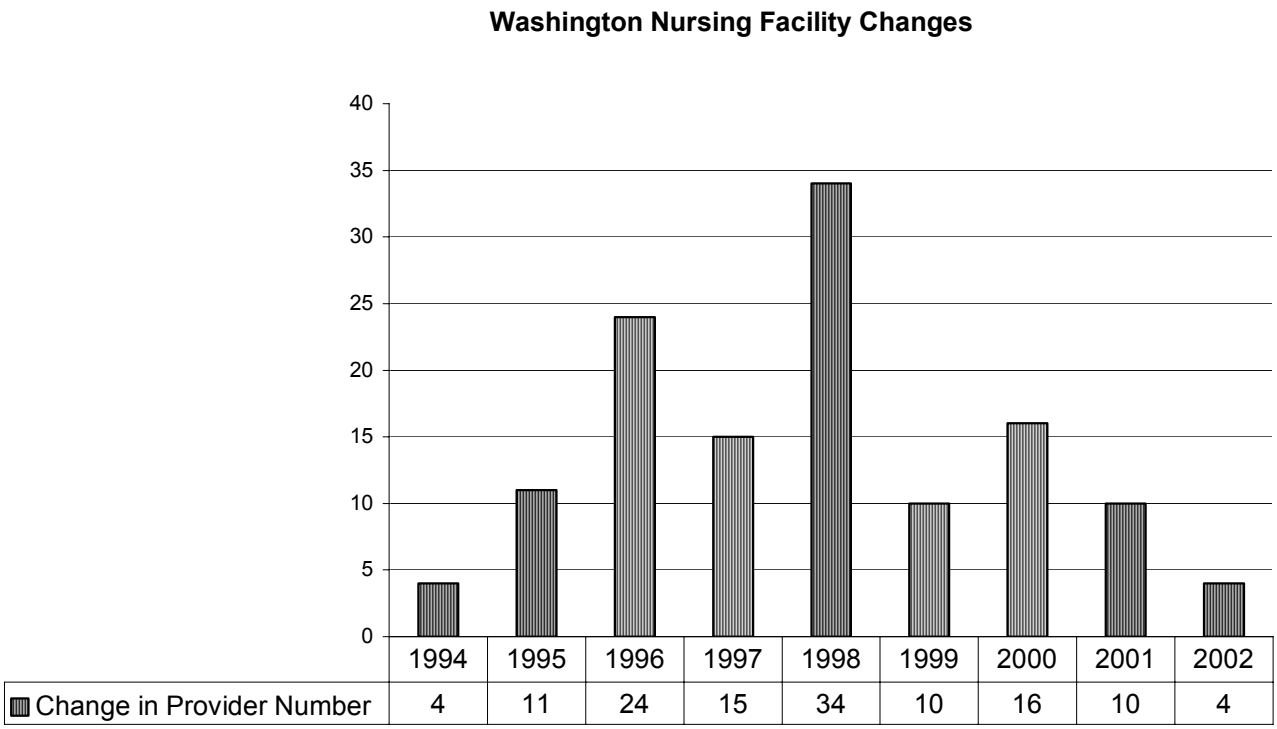
Cost Report Data

Evaluating the impact of the case mix payment system would be easier if the system had been imposed in a vacuum. Unfortunately, it was not. Many other variables were in play at the same time and will need to be considered in the analyses, e.g.: changes in population; increases in specialty units; innovative programs of care; changes in the Medicare program for skilled nursing facilities including the implementation of Medicare Prospective Payment; waiver programs; closures of nursing facilities; hold-harmless payment provisions; changes in the survey process and the implementation of Quality Indicators; wage add-ons to reduce staff turnover; changes in staffing ratios; and changes in ownership.

The design of the original study called for an examination of the periods immediately preceding and following, case mix implementation. To accomplish this, cost report data was provided for calendar years 1994, 1995, 1996 and 2000. Following delivery of some preliminary information for this interim report, the study was expanded to include cost data for 1997, 1998, 1999, 2001 and 2002 (still to be obtained). This expansion of the evaluation period more than doubled the amount of data to be studied.

For longitudinal analyses, the data from the public disclosure diskettes for the various years were merged into a common database. Over the eight-year period there have been changes in ownership, changes in licensee, tax reorganizations, changes in certification, facility closures and replacement facilities. In addition to the increase in data to be manipulated, an initial challenge was linking the data by name and vendor ID. The following chart estimates the volume of changes (and the resulting difficulty in linking the data) in provider number and names. (As the data was obtained from several sources and several facilities have undergone multiple changes during the study, exact counts may vary.)

Chart 1:



Changes in Provider Number include changes of ownership, new licensee, tax reorganization, facility closure, and replacement facilities.

After linking the cost report information, facility names and vendor numbers, and eliminating any facility without a cost report available in all years in the evaluation period, the database contained information on 210 providers. From the restated preliminary information, it was determined to exclude Bailey Boushay House from the analyses as an atypical facility. This exclusion results in an analyses database of 209 facilities. We linked quarterly rate information to the analyses database, which was then divided into three comparison populations:

1. Facilities receiving case mix payment since implementation of the case mix payment system
2. Facilities receiving case mix payment for some but not all of the quarters since implementation
3. Facilities receiving hold harmless rates until removal of the provision, effective 7/1/02

Although the outline for the expanded study described the three comparison groups, the second subgroup may need to be further subdivided. It currently includes facilities that received case mix payment for only one quarter during the time since implementation, as well as facilities that received case mix rates in all quarters but one. The impact of this wide variability will be evaluated and addressed in the final report.

Another alternative would be to redefine all of the subgroups. The 12/31/02 cost report data will include revenue and expenditure data for facilities that were receiving case mix rates during the entire twelve months covered by the cost report, facilities that had less than 12 months but more than 6 during which they received case mix rates, and facilities that had 6 months of case mix payment.

Once the public disclosure diskettes for the 2002 cost reports are available, we will complete the analyses database and finalize the comparison population subgroups. Comparisons in this interim report will use the three subgroups describe in the study outline. Lists included in the appendix detail facilities in each of the subgroups and also facilities currently excluded from the analyses.

MDS, RUG Data, and Quality Measures

Nursing facilities are required to complete the Minimum Data Set, a component of the Resident Assessment Instrument, to comply with the Nursing Home Reform Act of 1987. These assessments are completed on a resident at least quarterly and at a significant change in status. Reliability of the MDS dataset has increased overtime. Researchers have found the OSCAR and MDS datasets to be valuable tools for quality assessment, despite limitations. (GAO, 2002; Harrington et al., 2000b; Lawton et al., 1998).

The first interim report included significant analyses of the minimum data set information, RUG-III groups, and quality measures. After evaluating the RUG distribution for eight quarters, we found the acuity distribution within Washington nursing facilities, as measured by the MDS, to be very consistent. We also saw a very similar pattern of admissions and discharges.

Our recent data collection efforts included obtaining calendar year 2002 Minimum Data Set information. We have begun analyses of this data, including the calculation of RUG-III scores and the cognitive performance scales, but will not include information on this data until the comparable cost report data has been obtained. Updated quality measure and survey information will be collected closer to the time of the final report to allow the report to reflect as current of information as possible and to cover more of the periods under the case mix method of payment.

Wage and Benefit Data

The nursing facility industry reports increasing difficulty in the recruitment and retention of qualified staff, and we understand that the wage and benefit analysis is a priority of the task force.

The cost report provides summary data on staffing costs and hours of service. Using this data we have begun preliminary evaluations. We will be distributing a staffing and wage survey to collect more detailed information on salary and benefit levels as well as staff turnover statistics. The results of this survey will be evaluated by geographic area, ownership type, and Medicaid payment rate.

Difficulties in attracting and retaining staff impact the quality of care provided in nursing facilities. Also the high cost of turnover (hiring and training replacements) reduces monies available to compensate staff. The American Health Care Association reports an annual turnover rate for Nursing Assistants Certified (NAC) of 78% (AHCA 2002). Recruitment and retention of nursing assistants is reported as being a major workforce issue in almost every state, nationwide.

It is a task force priority to determine what level of staffing can be supported at prevailing wage rates within the current Medicaid direct care ceilings, and evaluate and recommend strategies the state could support (beyond and in addition to higher payment rates) to improve recruitment, retention, and the development of career ladders within the nursing facility and long-term care system. Current literature suggests that, in addition to increased wages, improved working conditions and better integration into the care team would assist in staff retention.

The final report will continue the evaluation of reported staffing and wages and benefits paid using both the cost report data and the facility survey.

V. Cost Report Data Analyses

States have the option of developing reimbursement methodologies used to allocate Medicaid program dollars among participating nursing facilities. These methodologies should provide funding sufficient for facilities to provide necessary services to meet care standards and provide an environment that promotes maintenance or enhancement of each resident's quality of life. A reimbursement methodology by itself will not insure quality care, however a system that distributes program dollars based on resident care needs should assist facilities in attaining and maintaining quality of care levels.

An anticipated reaction to changes in the reimbursement methodology would be changes in expenditure patterns. However, an argument frequently voiced by the nursing facility industry is that, given survey requirements and health care ethics, changes in Medicaid payment do not cause a reduction in expenditures but a shifting of costs to other payer sources. "Nursing homes have been able to maintain margin levels cross-subsidizing the cost of Medicaid patients' care with more generous rates paid by Medicare and private pay patients" (Dobson et al., 2002; Bishop, 2001).

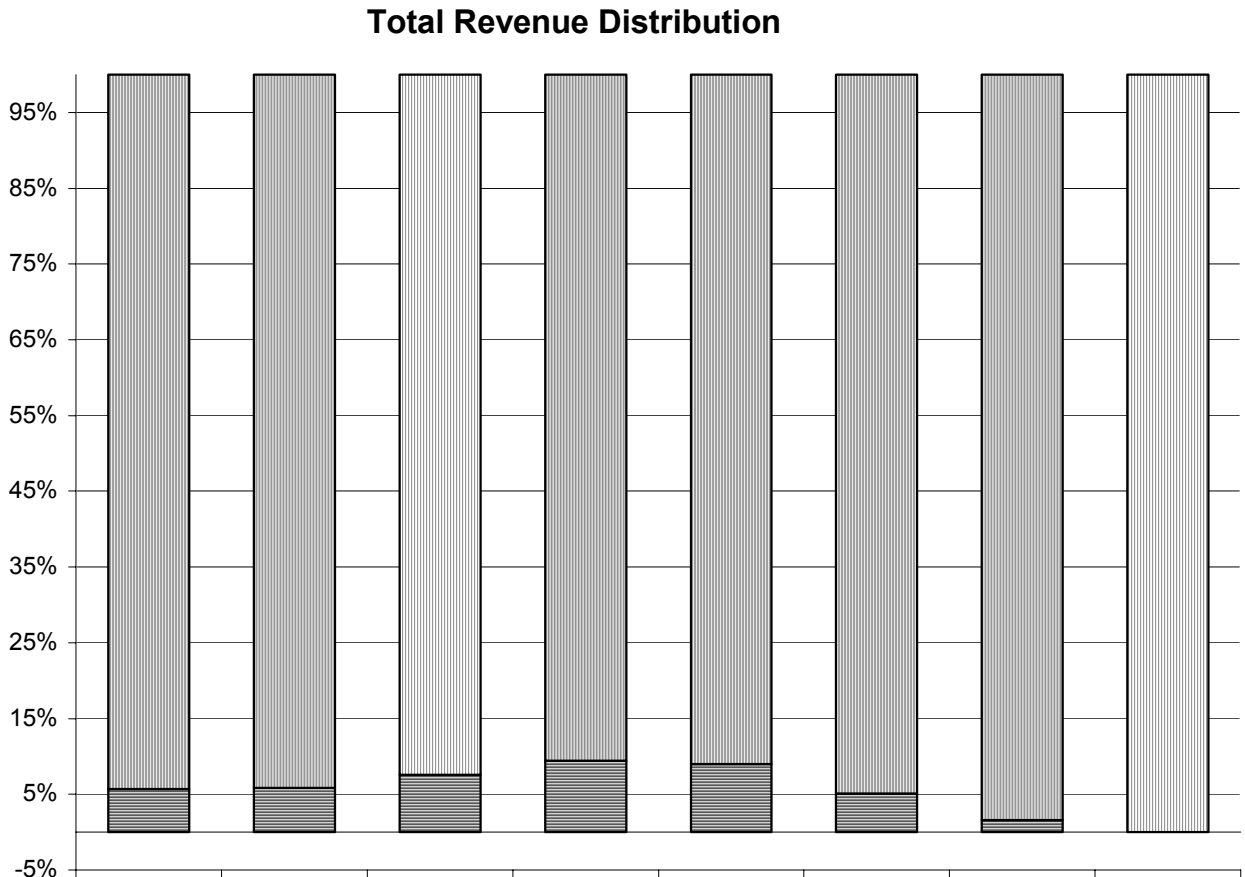
To better understand how program dollars are spent and the relationship among expenditures, nurse staffing levels (represented in hours of care per resident day) and quality of care, we will evaluate the data reported by facilities on the nursing facility cost report.

During the eight-year period under evaluation, the cost report has undergone a few changes. The data has been linked to the schedules and line items as reported on the 2001 Cost Report but may be adjusted with the addition of the 2002 cost data. The information available for analyses includes property, plant and equipment data from the balance sheet with related depreciation; routine revenue broken down by payer source and total revenue; direct care expense, as adjusted for cost reporting purposes, identified as in house, purchased or allocated and the related hours of service; support services, administration expense and total operation expense.

In order to evaluate potential shifting of expenditures between payer sources, it is important to understand the make-up of revenue to the facility. Routine revenue is revenue from care services provided as routine and billed within the per diem rate. Routine revenue comes from several payers: Medicaid, Medicare, VA, Champus, private insurance, and other private sources. In addition to the routine revenue, facilities can receive other revenue related to patient services such as therapy, pharmacy, supplies, respite care or mental health services; operating revenue such as laundry, meals, vending, or property rental; and non-operating revenue such as gains on the sale of assets, interest or dividends.

The following charts demonstrate the relationship between total revenue and routine revenue as well as the relationship between the various payers.

Chart 2:



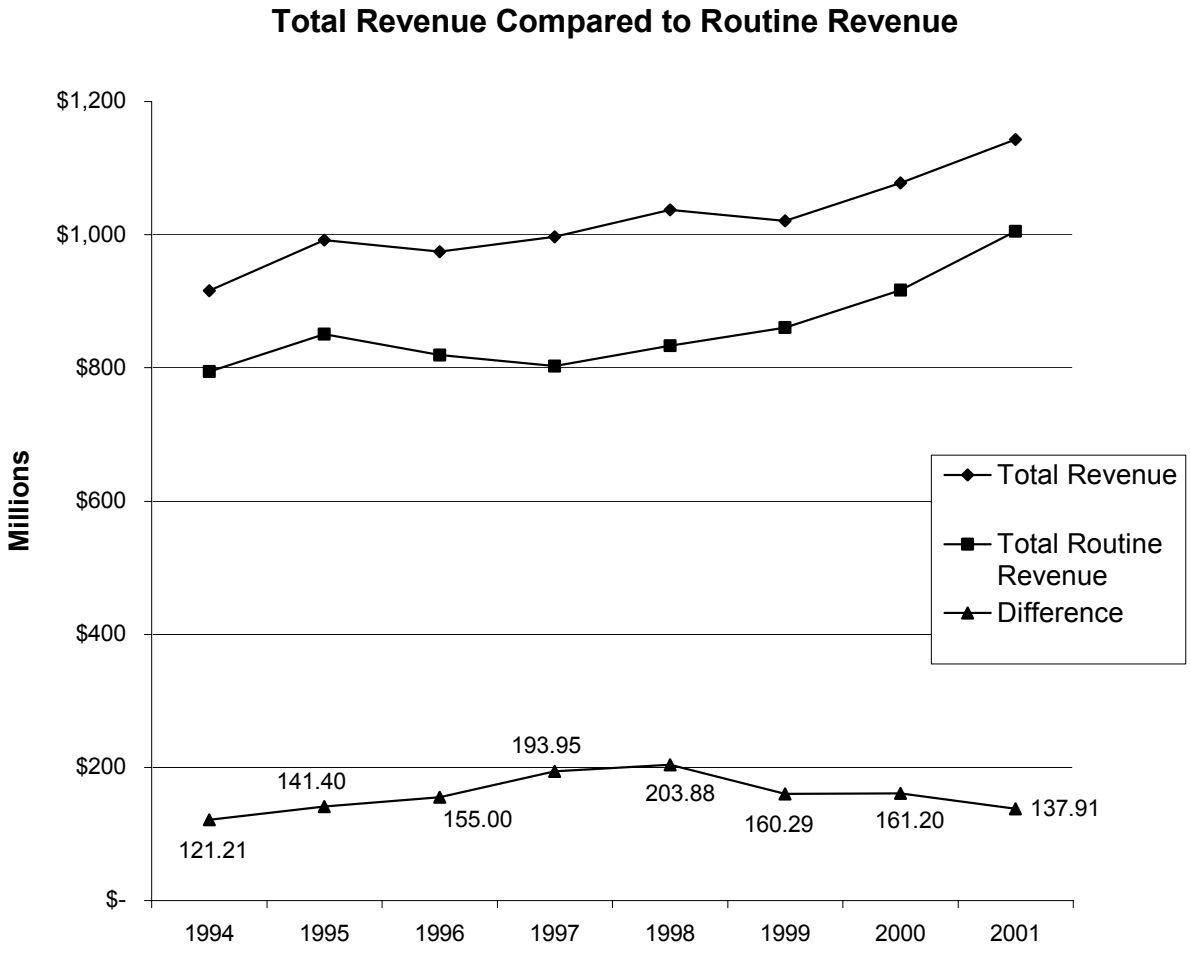
	1994	1995	1996	1997	1998	1999	2000	2001
Routine Revenue	94.29%	94.12%	92.44%	90.53%	90.98%	94.94%	98.43%	100.00%
Non-Routine	5.71%	5.88%	7.56%	9.47%	9.02%	5.06%	1.57%	0.00%

Calendar Year

When calculating an average of the percentages of non-routine to total, it appears that there is no non-routine revenue for 2001. To further evaluate the relationship of routine to non-routine revenue, we looked at total dollars of revenue in each year.

Total revenue for the 209 facilities in the analyses database increased from $916 million to $1.14 billion in the years from 1994 to 2001, while routine revenue increased from $794 million to $1.01 billion. The following chart plots both changes in total revenue and in routine revenue, and the differences between these revenue sources.

Chart 3:

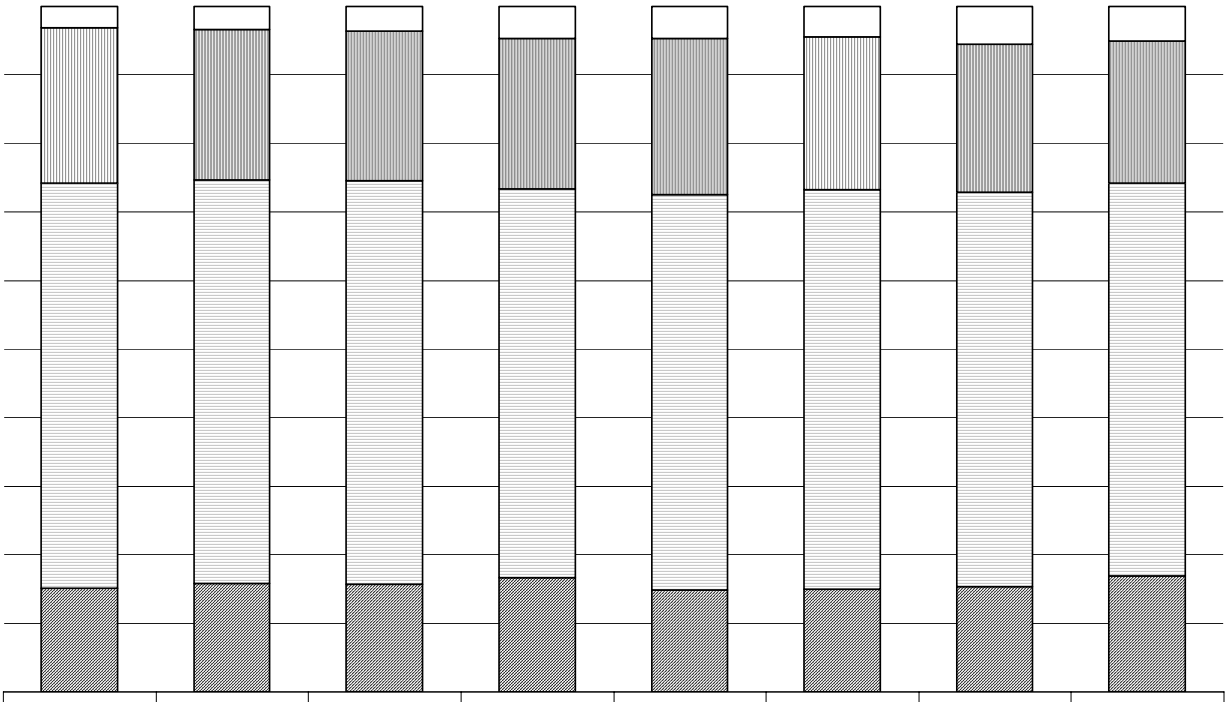


The implementation of the Medicare Prospective Payment System, and the change to billing therapy services as part of the routine rate may partially explain the reduction in the distribution percentage of non-routine revenue seen in Chart 2 and the reduction in the differential in Chart 3.

The distribution of the various payers within routine revenue shows some variation, but the overall distribution has been very similar over time. The final report will evaluate any changes in the distribution since implementation of the case mix payment, comparing the distribution of the various subgroups and also evaluating the level of Medicaid occupancy and case mix indices.

Chart 4:

Routine Revenue Distribution



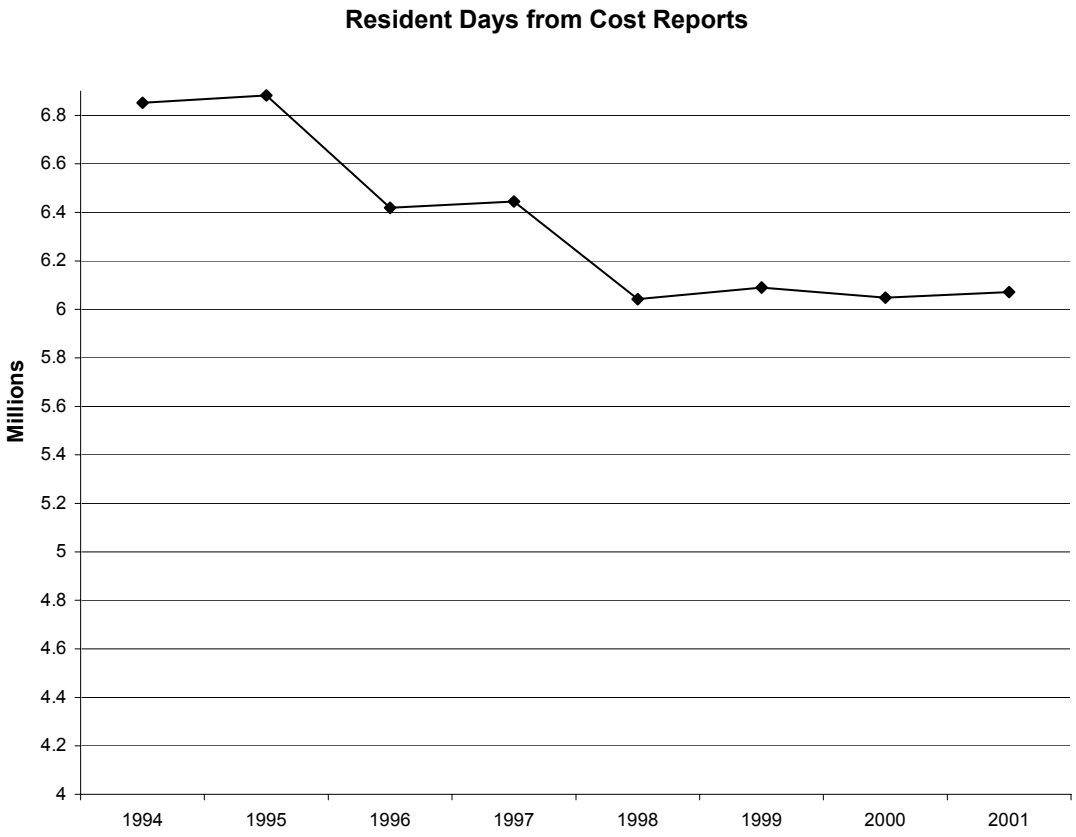
	1994	1995	1996	1997	1998	1999	2000	2001
Other	3.15%	3.39%	3.56%	4.66%	4.65%	4.45%	5.53%	4.99%
Private	22.58%	21.93%	21.82%	21.81%	22.76%	22.25%	21.57%	20.79%
Medicaid	59.18%	58.88%	58.94%	56.59%	57.67%	58.30%	57.61%	57.35%
Medicare	15.09%	15.80%	15.68%	16.58%	14.92%	15.00%	15.29%	16.87%

Calendar Years

According to a Lewin Group report, Medicaid payments nationally account for only 50% of the facility revenues (Dobson et al. 2002). The percent of routine revenue from Medicaid in Washington has varied from a high of 59.18% in 1994 to a low of 56.59% in 1997.

Another important trend when evaluating the impact of Medicaid rates upon access and quality is to evaluate changes in the demand for services.

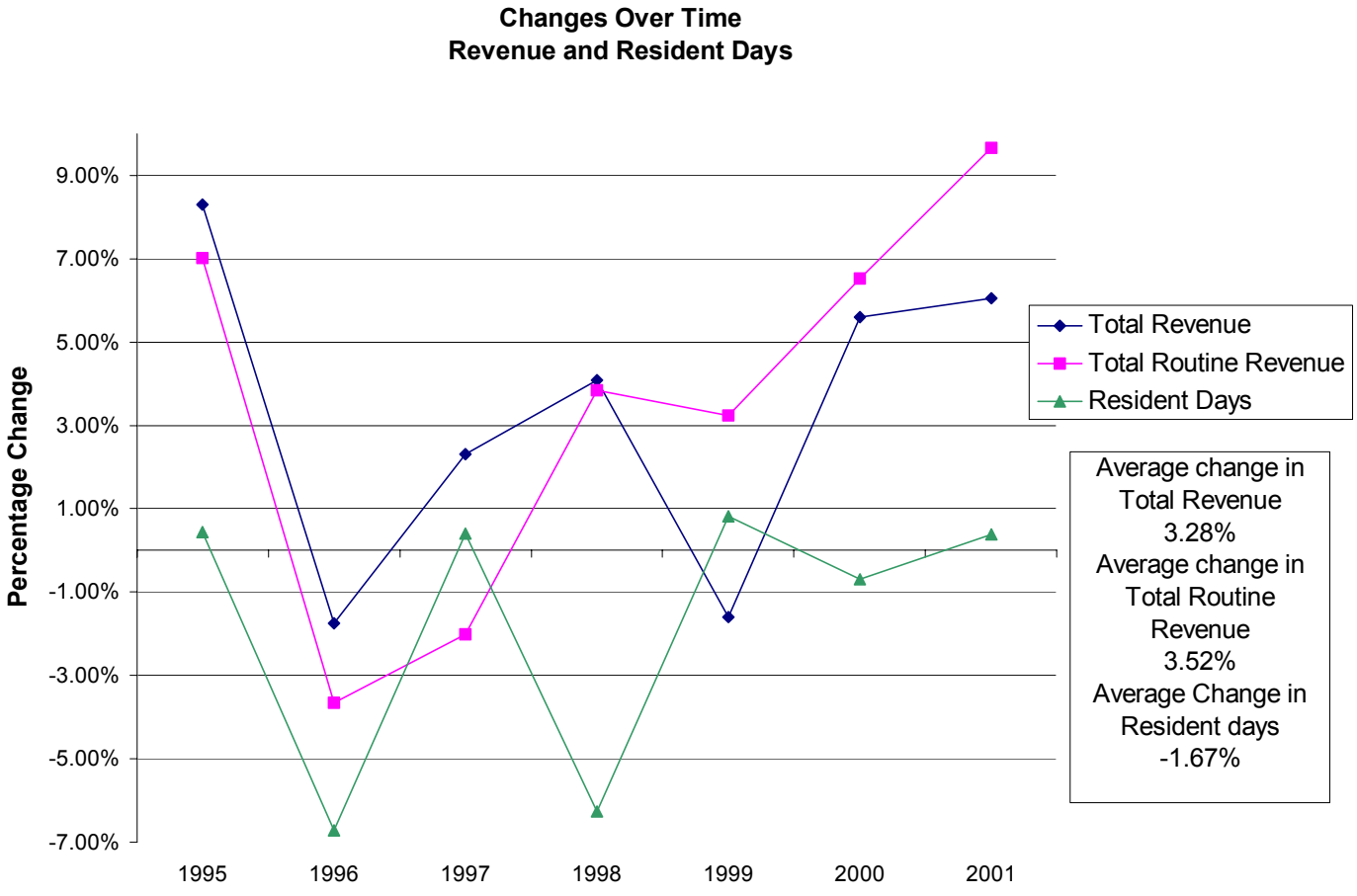
Chart 5:



Resident days obtained from this cost report data show a decline in reported days from 6.85 million to 6.07 million from 1994 to 2001. This decline is most probably linked to increases in available alternative services that have been occurring over the last several years.

The following chart illustrates the changes in total revenue, routine revenue and resident days. Changes are represented by percentages rather than actual amounts to allow for comparison.

Chart 6:



Although there was some fluctuation in direction of the changes, the overall effect of the eight years was an average increase of 3.28% in total revenue, an average increase of 3.52% in routine revenue, and an average 1.67% reduction in resident days.

Table 1:

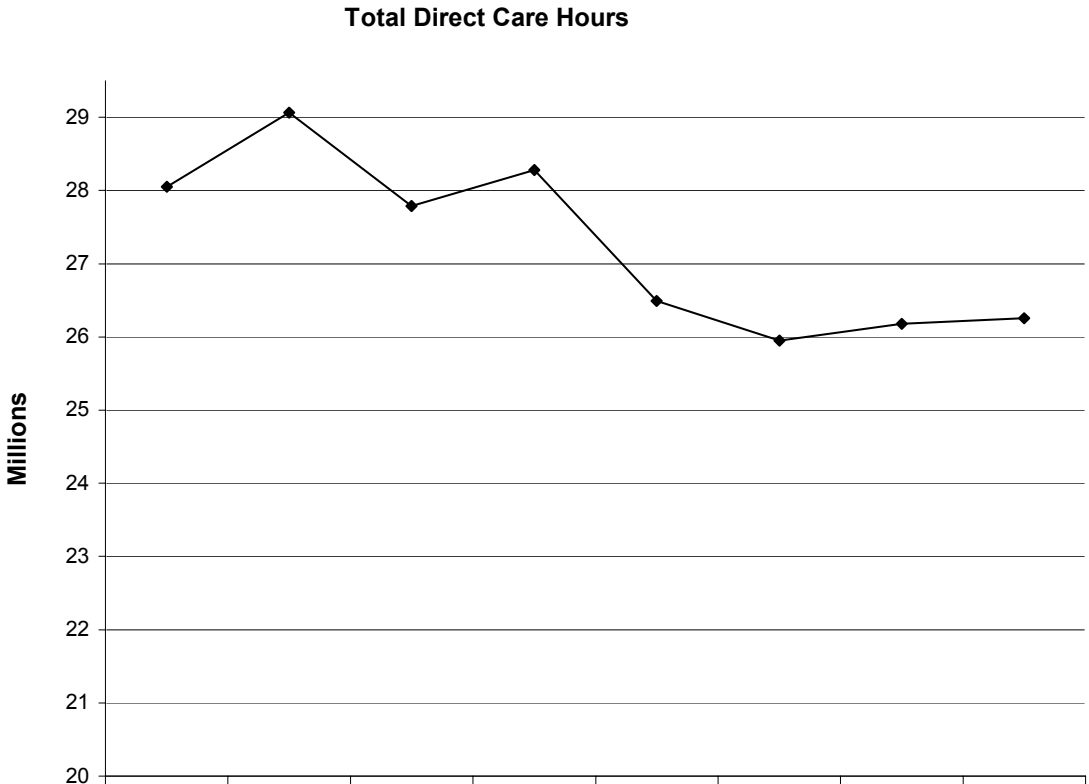
Consumer Price Index –Urban US City Average All Items		
Year	December Index	Dec-Dec Change
1993	145.8	NA
1994	149.7	2.7
1995	153.5	2.5
1996	158.6	3.3
1997	161.3	1.7
1998	163.9	1.6
1999	168.3	2.7
2000	174.0	3.4
2001	176.7	1.6
2002	180.9	2.4

Data from the US Department of Labor, Bureau of Labor Statistics

From December 1993 until December 2002 there was a 24.1% increase in the CPI-U for an average increase of 2.7% per year. The increases in the revenue numbers reflect increases slightly higher than inflation trends, measured by the consumer price index, as illustrated in the table above. These increases above expected inflation might be linked to a variety of causes such as increases in resident care needs or changes in the rate payment methodologies. Continued analyses will be performed after the 12/31/02 cost data is obtained, to evaluate the trend and its significance.

We evaluated the change in total hours of direct care service provided. The total number of hours of service has decreased from just over 28 million in 1994 to approximately 26.25 million in 2001.

Chart 7:



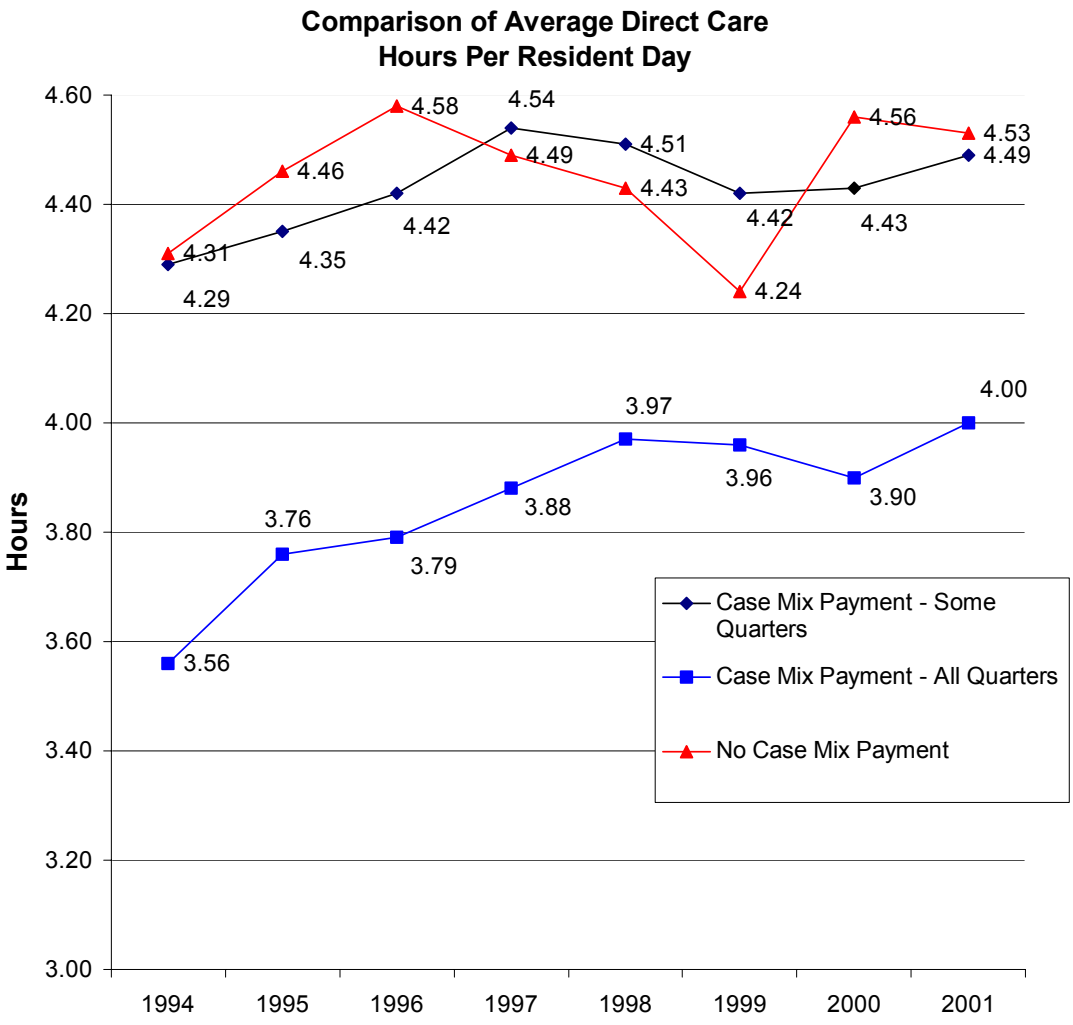
	1994	1995	1996	1997	1998	1999	2000	2001
Total Direct Care Hours	28,049,412	29,065,113	27,787,931	28,278,385	26,490,994	25,952,458	26,175,378	26,253,128

This decrease corresponds with the decrease in resident days, resulting in a figure for average direct-care-hours per resident day that has changed only slightly over the 8-year period, going from 4.23 hours per resident day in 1994 to 4.46 hours per resident day in 2001, or an average rate of increase of .8% per year, as shown on the following chart. Current minimum staffing requirements of the Centers for Medicare and Medicaid Services are for a total of 2.95 hours per resident day, with a preferred minimum of 3.45 hours per resident day. Recommendations from the National Citizen's Coalition for Nursing Home Reform call for a total of 4.13 hours of direct patient care, at least 1.2 hours of which should be provided by an RN or an LPN. (NCCNHR, 1998; CMS, 2001; Harrington et al., 2000a)

The intent of the hold harmless provision was to protect higher-cost facilities from a rate reduction. Thus, low-cost facilities qualified initially for case mix rates and the higher cost facilities were held harmless from case mix implementation. Low direct care hours per resident day for the case mix facilities is primarily a function of the criteria used to establish hold harmless rather than any case mix inadequacy. While differences in trends may be of interest, relative differences between groups are not significant at this point.

For comparison purposes, we plotted the average direct care hours per resident day for the three comparison groups.

Chart 8:

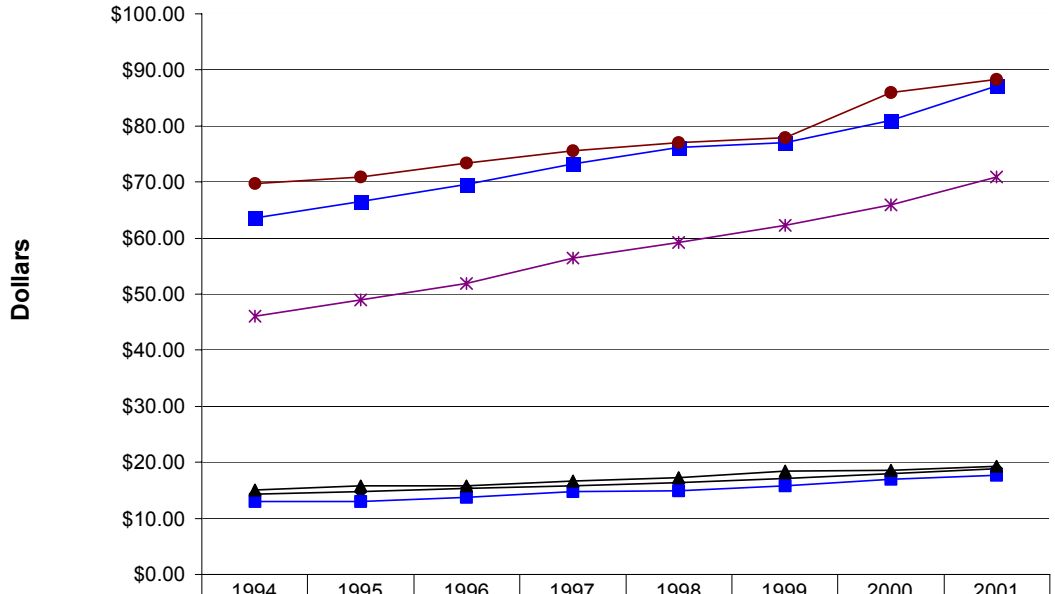


Case mix index averages were computed for each quarter of 2001 for both the entire resident population and the Medicaid population. These quarterly case mix indices were then averaged for an annual average number. Using these case mix averages, we compared the three comparison subgroups. For the facilities that received case mix payment in all quarters, the facility average case mix index is 1.93 and the Medicaid average is 1.79. Facilities that received case mix in some but not all quarters had a facility average case mix index of 1.89 and a Medicaid average of 1.75. Facilities that received the hold harmless rates during the entire period had a facility average case mix index of 1.86 and a Medicaid average of 1.67.

Using the cost report data, we computed the average cost per hour and the average cost per resident day of direct care for each of the comparison sub groups. These are shown on the following chart.

Chart 9:

Comparison of Average Total Direct Care Expenses



	1994	1995	1996	1997	1998	1999	2000	2001
Some Quarters Per Hour	$14.35	$14.79	$15.31	$15.79	$16.37	$17.08	$17.96	$18.92
All Quarters Per Hour	$13.04	$13.08	$13.74	$14.81	$14.94	$15.80	$16.93	$17.75
No Case Mix Payment Per Hour	$15.07	$15.75	$15.84	$16.65	$17.27	$18.49	$18.61	$19.35
Some Quarters Per Resident Day	$63.55	$66.51	$69.62	$73.21	$76.24	$77.10	$81.01	$87.15
All Quarters Per Resident Day	$46.12	$48.98	$51.92	$56.41	$59.19	$62.33	$65.95	$70.94
No Case Mix Payment Per Resident Day	$69.67	$70.84	$73.42	$75.62	$77.07	$77.86	$85.96	$88.34

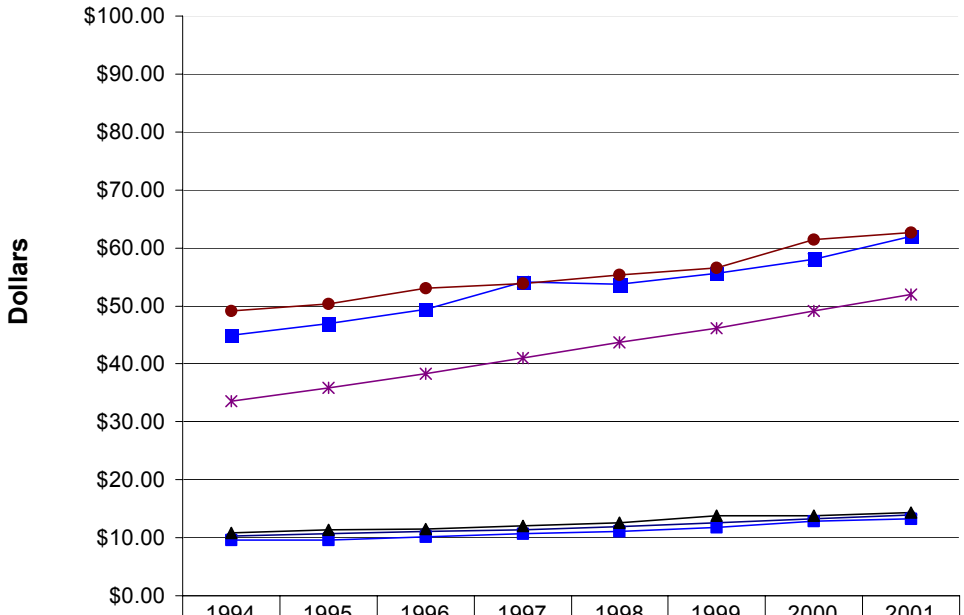
In the facilities that received case mix payment in all quarters, the differences in per resident day costs reflect both the lower average direct care cost per hour and the lower average number of hours per resident day. Further analyses will be completed after obtaining the 2002 cost report data

Direct care costs reported on the cost report are shown as services provided by in house facility staff, related fringe benefits and payroll taxes and nursing supplies; services purchased from staff of a service bureau; and services allocated to the nursing facility from chain or combination facilities or other shared facility costs. The allocated costs are reported on Part A of Schedule G-2 along with the basis for allocation.

The following chart illustrates the average cost of direct care salary expense for the in house staff, per hour and per resident day for the three comparison subgroups. The costs of the groups follow a very similar pattern.

Chart 10:

Comparison of Average In House Direct Care Salary Expense



	1994	1995	1996	1997	1998	1999	2000	2001
Some Quarters Per Hour	$10.33	$10.68	$11.10	$11.33	$11.86	$12.58	$13.25	$13.99
All Quarters Per Hour	$9.56	$9.59	$10.15	$10.72	$11.04	$11.72	$12.79	$13.24
No Case Mix Payment Per Hour	$10.81	$11.34	$11.56	$12.01	$12.65	$13.81	$13.78	$14.28
Some Quarters Per Resident Day	$44.90	$46.98	$49.39	$54.19	$53.70	$55.68	$58.07	$61.99
All Quarters Per Resident Day	$33.60	$35.90	$38.32	$40.99	$43.69	$46.13	$49.10	$52.02
No Case Mix Payment Per Resident Day	$49.07	$50.34	$53.03	$53.87	$55.40	$56.63	$61.48	$62.70

The difference between the average per hour total direct care expense and the average in house direct care salary expense has been increasing slightly each year and will be evaluated in more detail in the final report. A survey planned of the facilities should include details of fringe benefits provided and the volume of services purchased from outside service bureaus.

Using the Washington Employment and Wage statistics for 2001 for healthcare practitioners and technical occupations and for healthcare support occupations including nurse aides, orderlies and attendants (included in the tables in the appendix) we developed a composite per hour rate. We weighted the composite rate using average Washington staffing distributions as reported on the Nursing Home Compare site, i.e. .9 hours RN, .7 hours LPN and 2.6 hours for C.N.A. per resident day.

Table 2 **Composite Rate Per Hour**

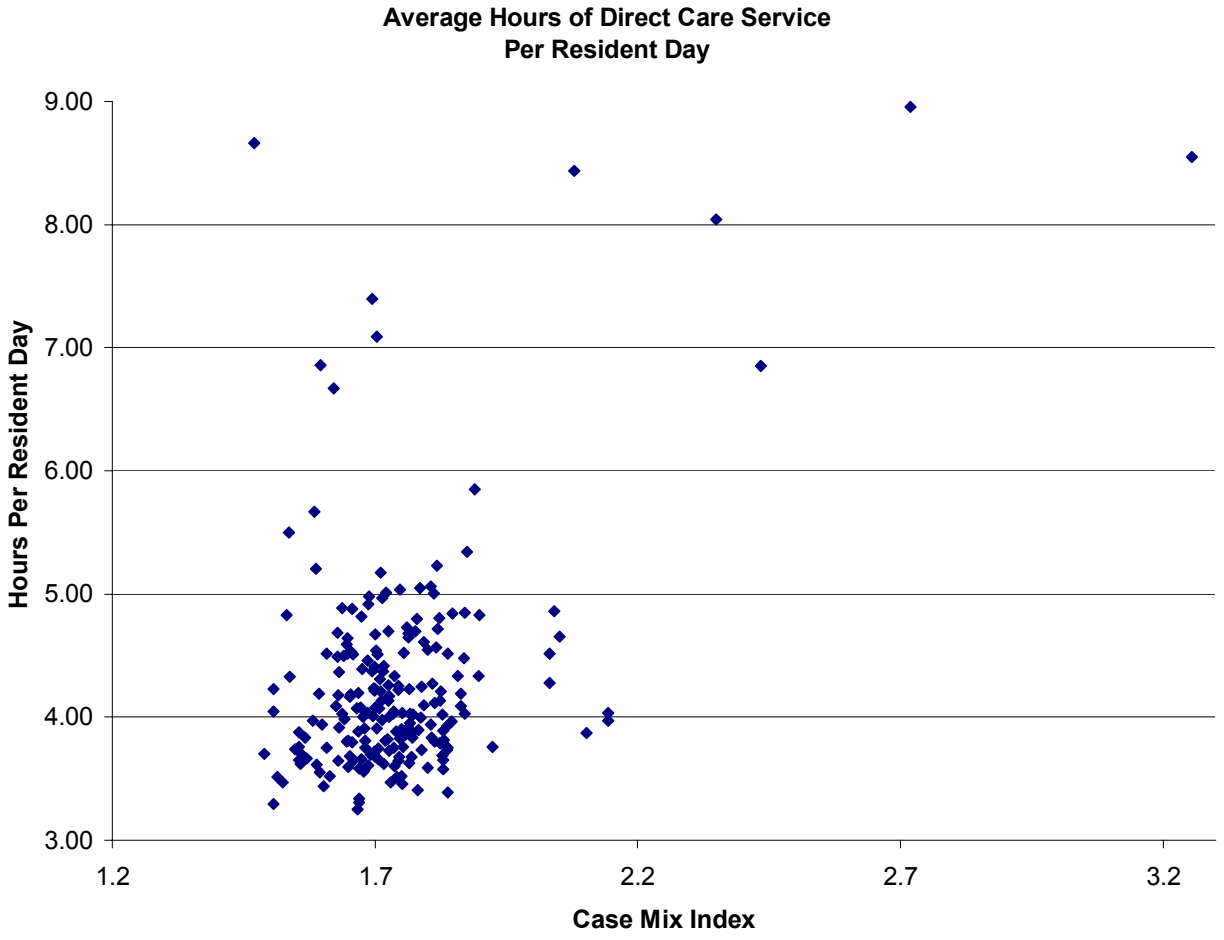
	Healthcare Practitioners	LPN/LVN	Healthcare Support	Aides	Composite Rate
Statewide	27.59	16.27	11.95	10.46	15.05
Rural East	23.17	14.85	10.42	9.05	13.00
Rural West	25.60	15.65	10.47	9.18	13.73
Bremerton MSA	25.57	16.32	11.39	10.41	14.60
Bellingham	24.60	14.81	10.79	8.99	13.26
Olympia	26.79	14.89	11.76	10.04	14.38
Portland, Vancouver	26.35	16.52	11.35	10.84	15.06
Richland, Kennewick, Pasco	25.26	14.78	10.89	10.03	14.04
Seattle, Bellevue, Everett	29.47	17.03	13.04	11.64	16.30
Spokane	27.18	16.54	11.49	9.72	14.55
Tacoma	26.85	16.58	12.00	10.58	15.02
Yakima	24.35	15.60	10.13	9.15	13.44

As calculated from the cost reports and detailed on Chart 10, the 2001 per hour cost of in house direct salary is $13.99 for facilities receiving case mix for some but not all of the quarters, $13.24 for facilities receiving case mix in all quarters and $14.28 for facilities not receiving case mix payment until 7/1/03. This is compared to our composite rate of $15.05 statewide, with a range from $16.30 in Seattle to $13.00 in the eastern rural Washington. Further analysis will be completed with the data obtained through the anticipated staffing and salary survey.

We arrayed the analyses database by hours of direct care service provided from lowest to highest. The array was then graphed plotting hours of direct care service by facility average case mix indices. It would be

expected that as the number of hours of direct care service increased, the facility average case mix indices would also be increasing (higher care residents receiving higher amounts of care).

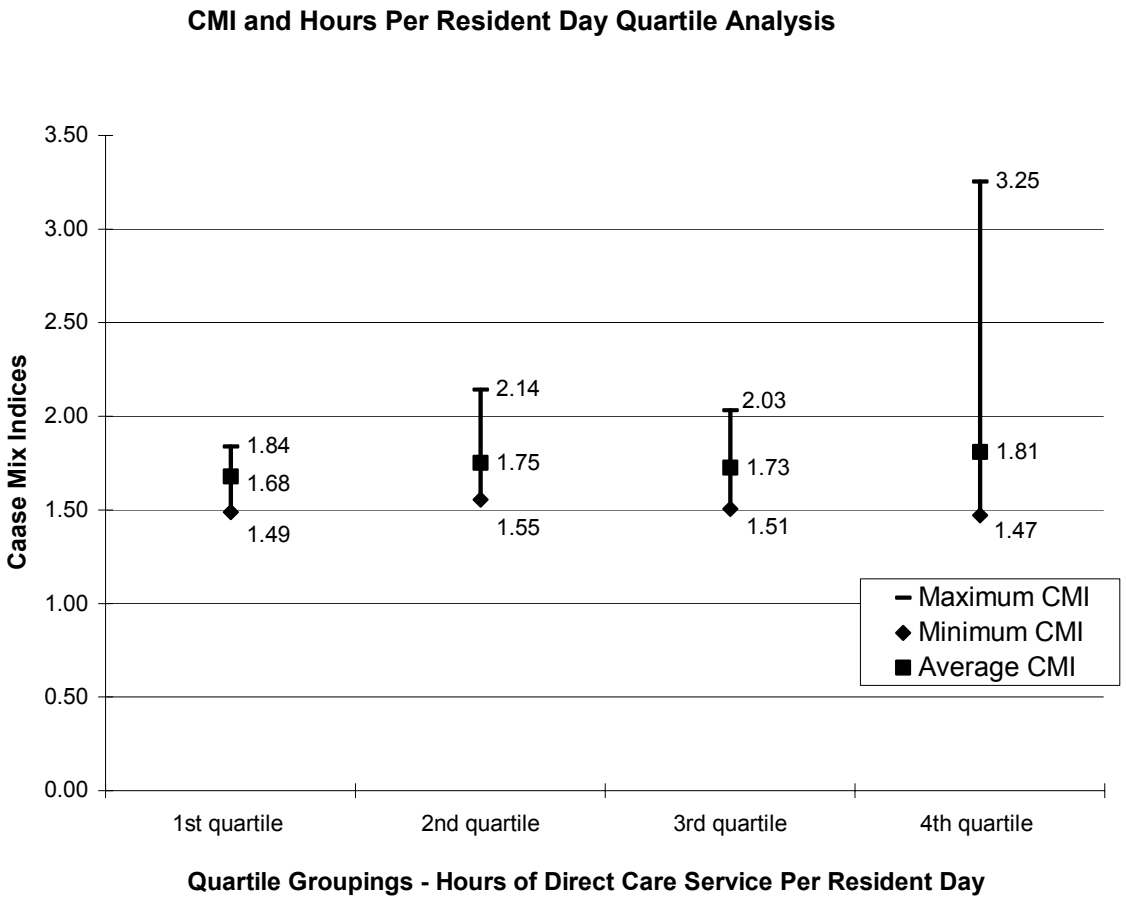
Chart 11:



There does not seem to be a strong link between increase in the facility average CMI and the number of hours of direct care service provided. Given the large number of facilities to evaluate, we have divided the population into quartiles to study the impact of case mix on both hours of direct care service per resident day and on the cost of direct care. As seen in the following chart, the maximum, minimum and average CMI values in the second and third quartile appear to be reversed from what would be expected, with the measures being higher in the second quartile. The maximum and average values in the fourth quartile are more what would

be expected. However, the minimum CMI in the fourth quartile is actually lower than the minimum CMI in the first quartile.

Chart 12:



We arrayed the analyses database by cost per resident day of direct care service provided from lowest to highest. The array was then graphed plotting cost of direct care service by facility average case mix indices. It would be expected that as the cost of direct care service increased, the facility average case mix indices would also be increasing (direct care costing more for higher care residents care).

Chart 13:

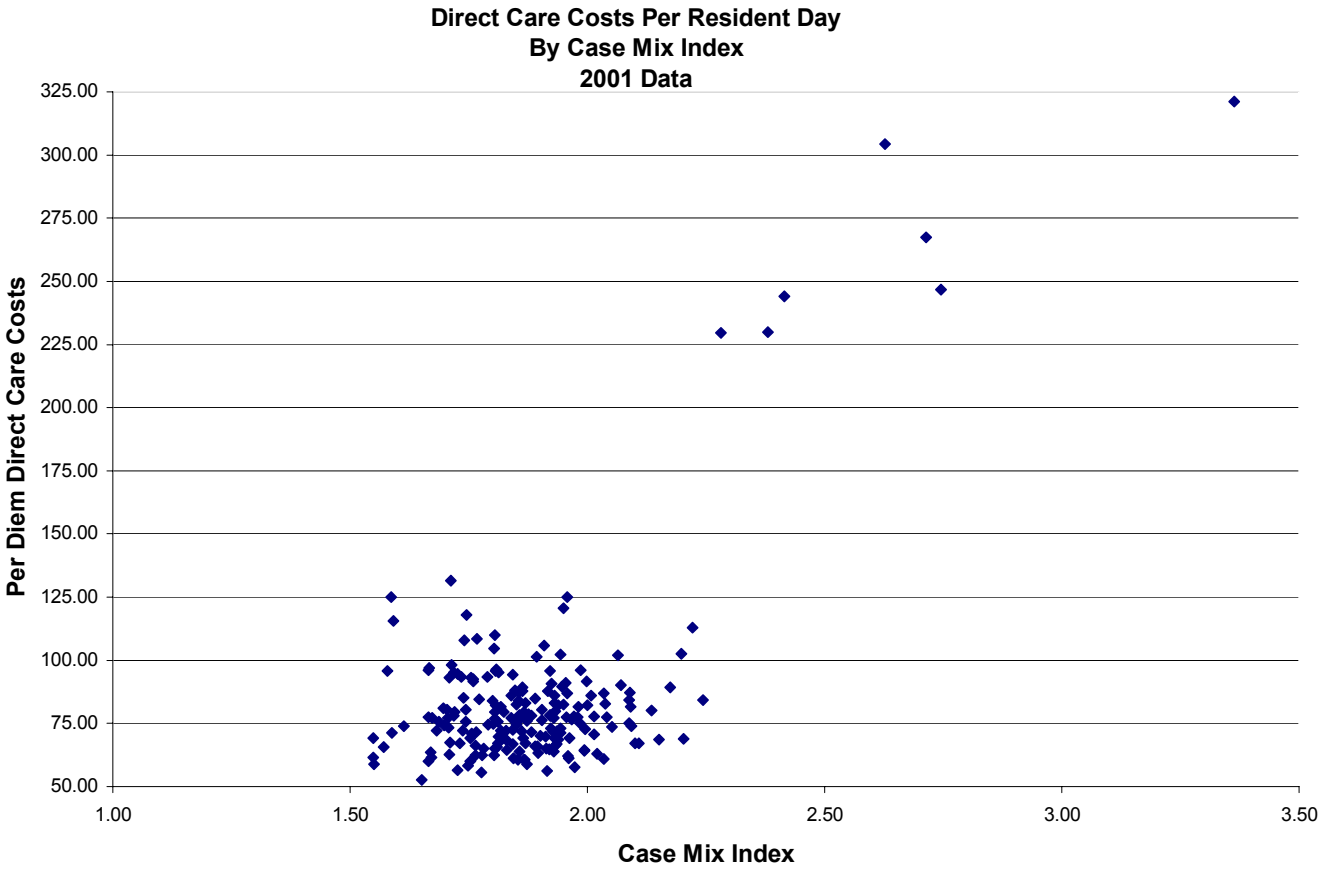
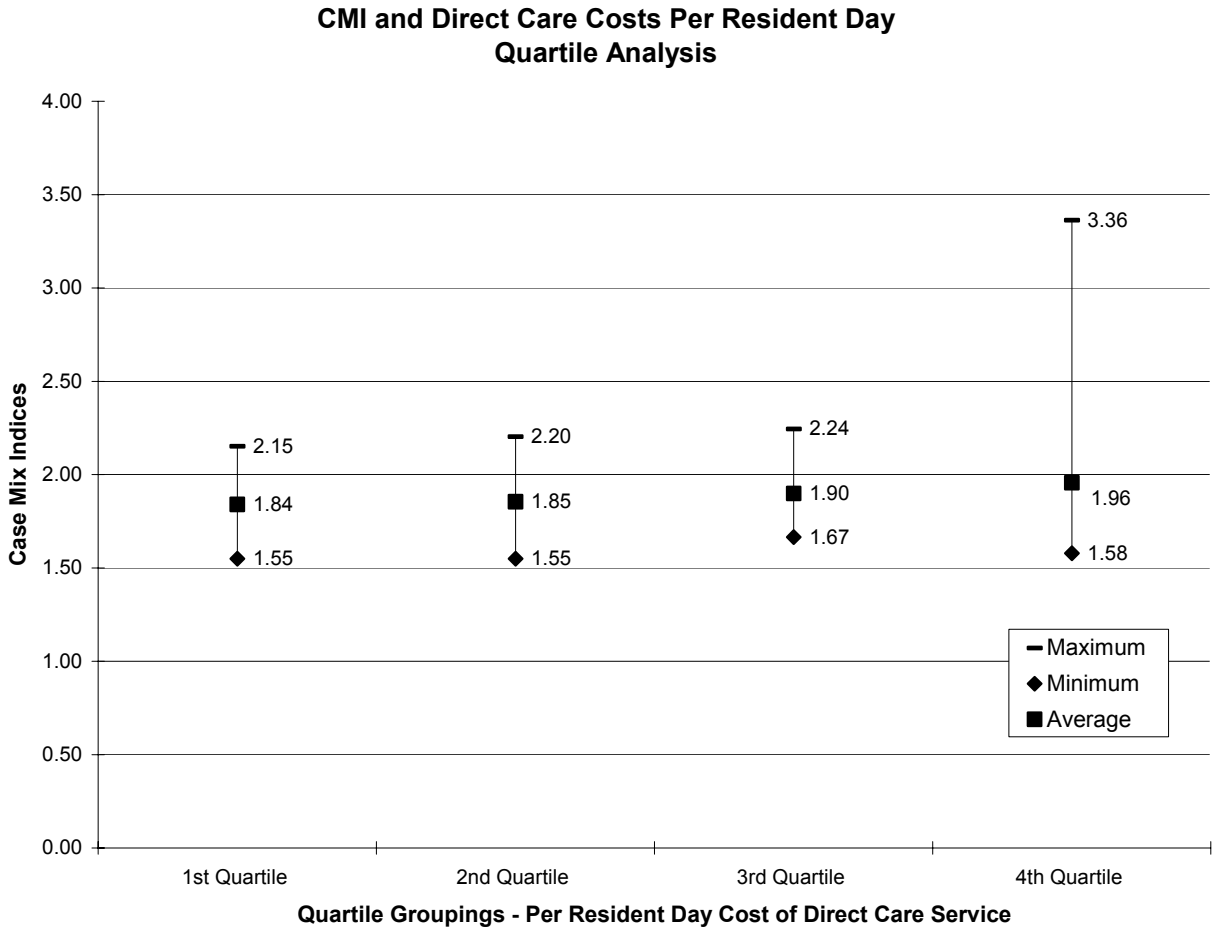


Chart 14:



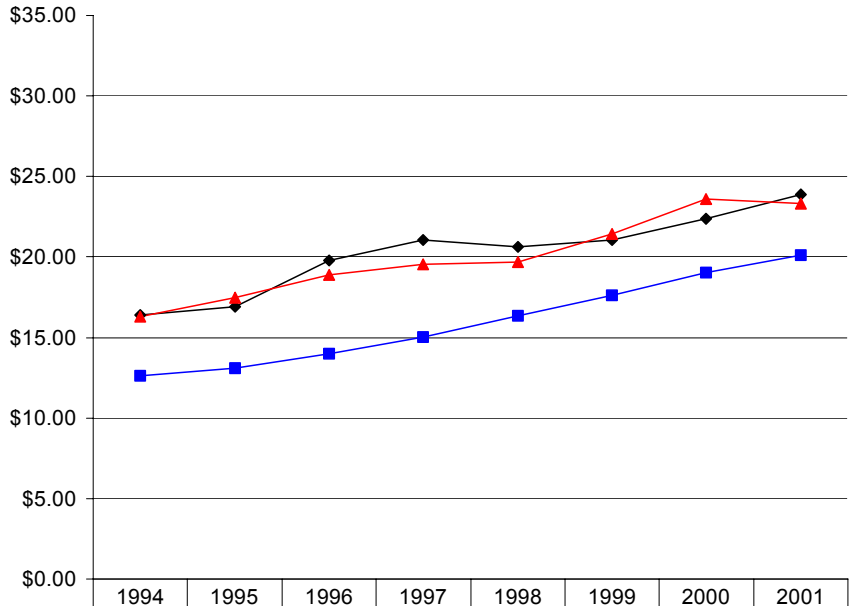
The statistical measures in the graph above follow a more expected pattern with both the average and the maximum case mix index increasing from each subsequent quartile.

Of the facilities with case mix payment in all periods since implementation, seven were in the first quartile, seven in the second quartile and four in the third quartile.

Although not directly linked to the case mix adjustment, other cost center expenditures impact overall facility costs and the resulting rates. We will monitor trends in administration and operating costs and support services to evaluate if there is any cost shifting or changes in spending patterns. Observed changes could be a reaction to the changes in the payment system, changes in the industry or changes in the economic environment. We have plotted per day administration costs for the three comparison subgroups identified above and will continue the review in the final report.

Chart 15:

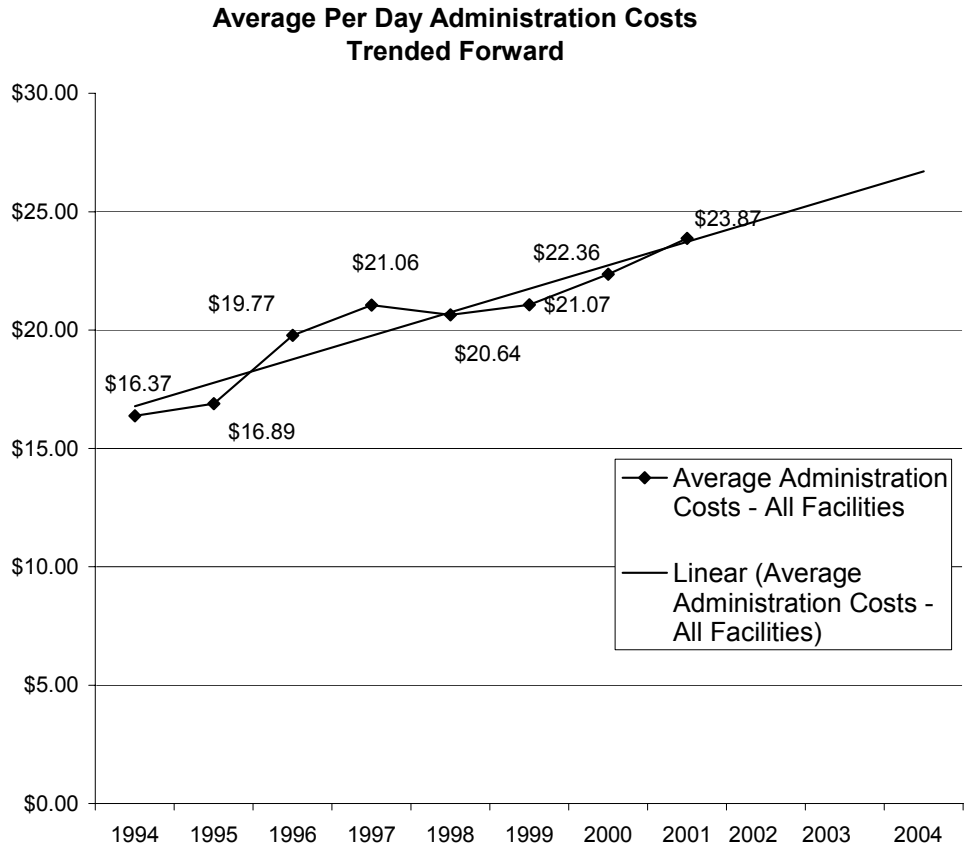
Comparison of Average Per Day Administration Costs



	1994	1995	1996	1997	1998	1999	2000	2001
Case Mix Payment - Some Quarters	$16.37	$16.89	$19.77	$21.06	$20.64	$21.07	$22.36	$23.87
Case Mix Payment - All Quarters	$12.62	$13.09	$13.97	$15.04	$16.33	$17.63	$19.01	$20.11
No Case Mix Payment	$16.30	$17.46	$18.88	$19.53	$19.71	$21.42	$23.62	$23.30

To assist in graphically evaluating the cost increases, we have added a trend line that projects the cost forward for three periods or until 2004.

Chart 16:



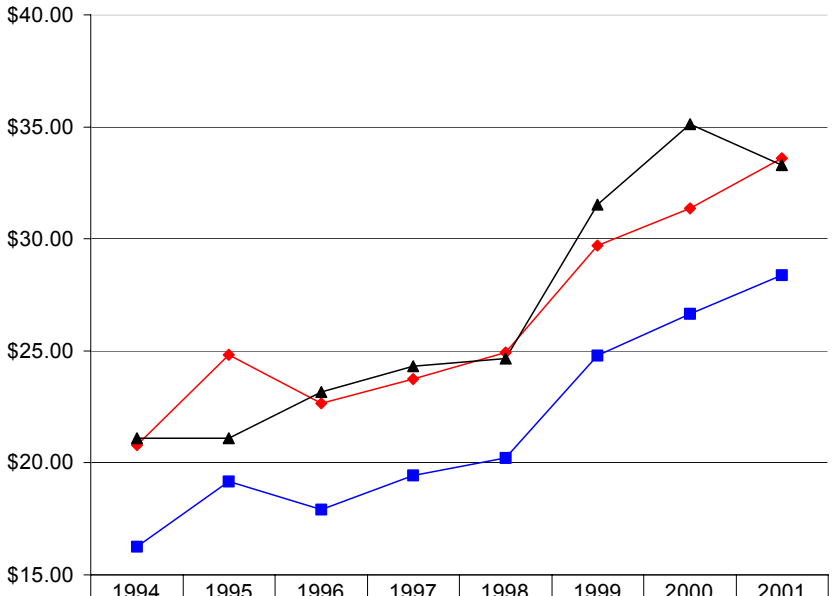
From 1994 until 2002, the average per diem administrative costs have increased 65% or an average of approximately 9.3% per year. Although the percent of cost changes have varied over time, they are currently above the trend line. In other words, the increase between the average administration costs from 1999 to 2000 was 16.5% and from 2000 to 2001 was 10.1%

Average per day operations costs, including administration, were plotted for the facilities in the three comparison subgroups. Although the costs for the facilities with case mix rates in all periods were consistently lower, they followed a similar pattern of changes to those facilities that received case mix payment in some but not all of the quarters. The pattern of the facilities

without case mix payment seems somewhat inconsistent and will require further analysis as we work to complete the final report.

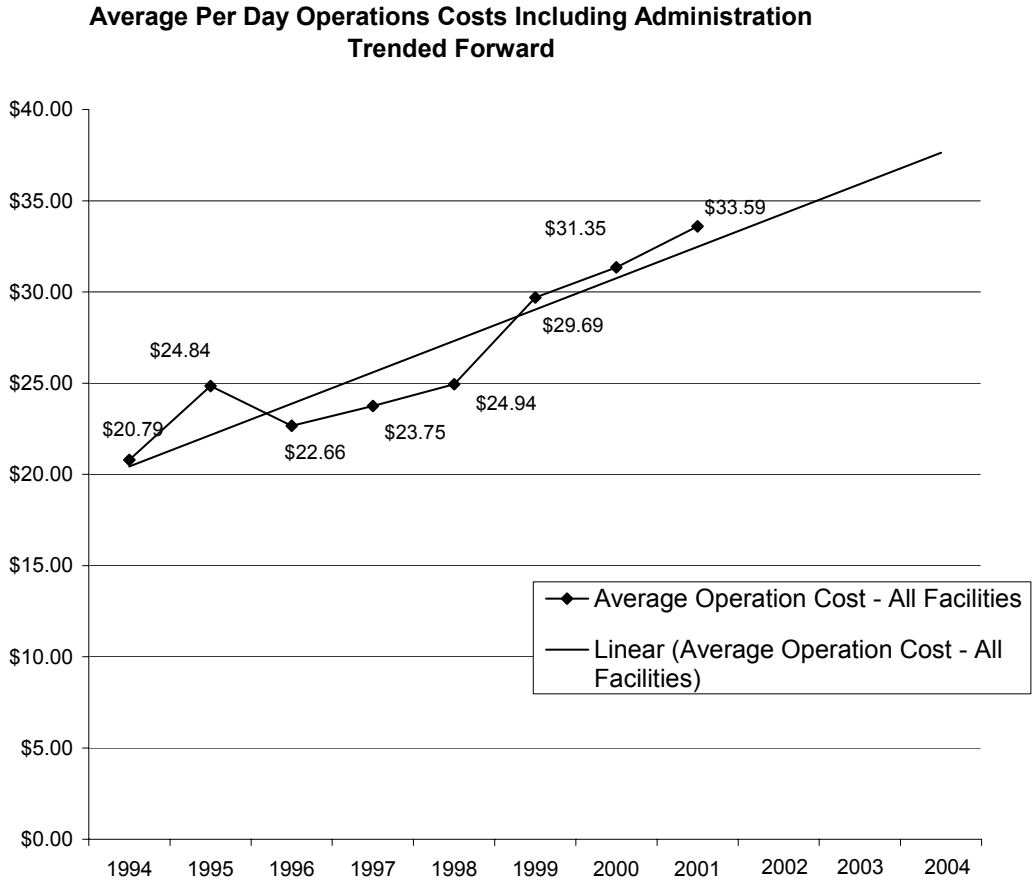
Chart 17:

Comparison of Average Per Day Operations Costs Including Administration



	1994	1995	1996	1997	1998	1999	2000	2001
Case Mix Payment- Some Quarters	$20.79	$24.84	$22.66	$23.75	$24.94	$29.69	$31.35	$33.59
Case Mix Payment - All Quarters	$16.25	$19.18	$17.92	$19.44	$20.22	$24.79	$26.65	$28.37
No Case Mix Payment	$21.11	$21.10	$23.18	$24.33	$24.66	$31.53	$35.13	$33.30

Chart 18:

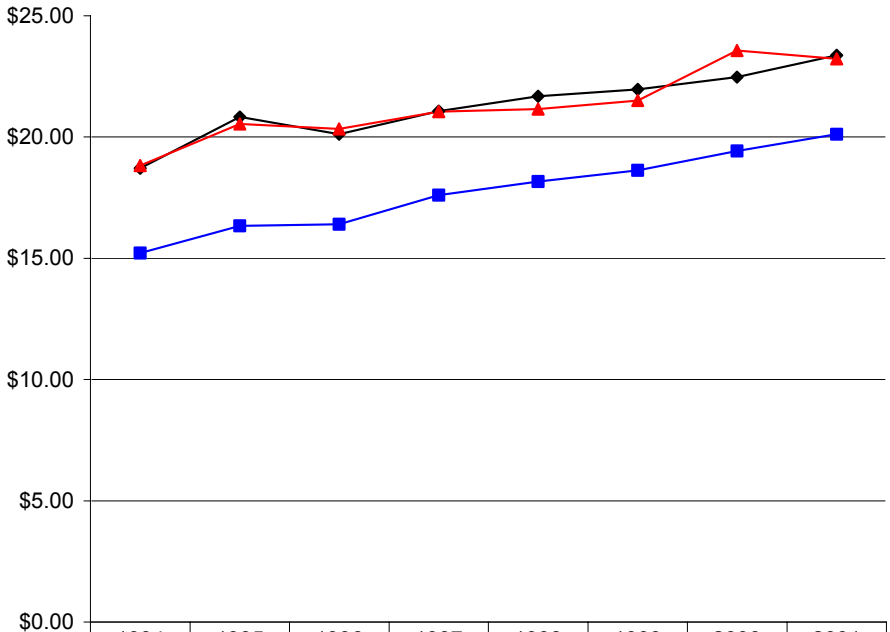


From 1994 until 2002, the average per diem operations costs have increased 78%, or an average of approximately 11.2% per year. Although like the administration costs the percent of cost changes have varied over time, they also are currently above the trend line with an increase between 1998 and 1999 of 21.1% and between 1999 and 2000 of 13.3%.

Average per day support costs for the three comparison subgroups were plotted on the following graph. Again, there is a fairly similar pattern of cost changes over time.

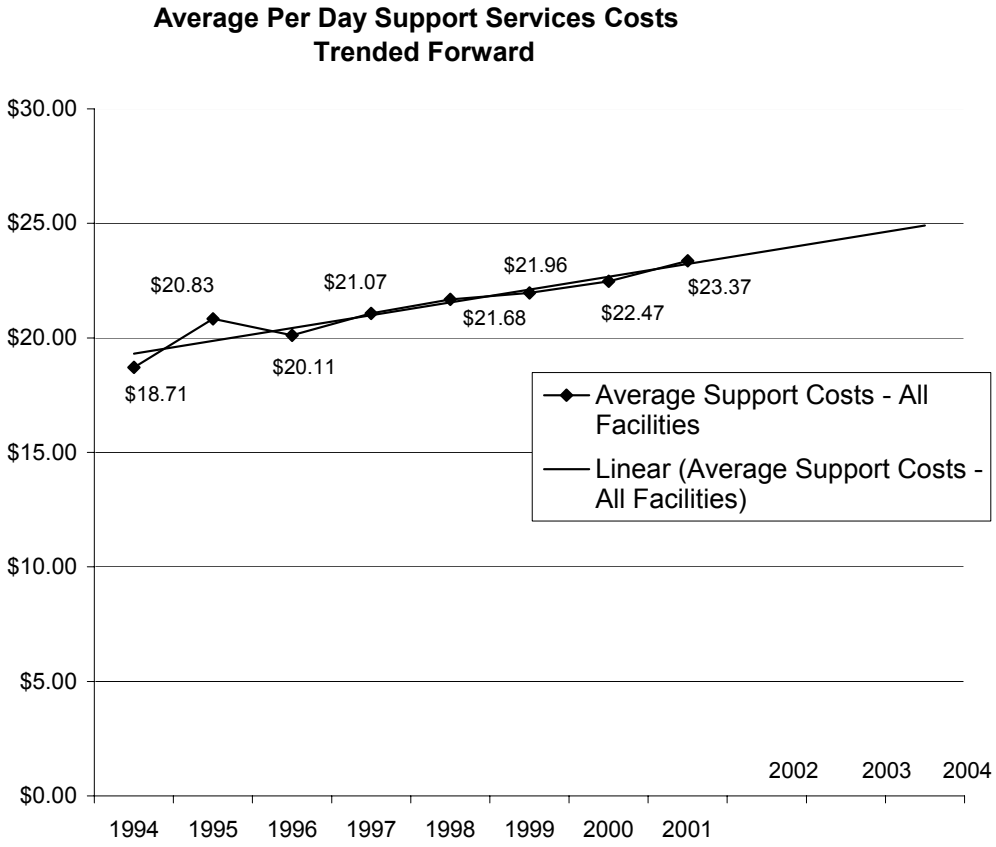
Chart 19:

Comparison of Average Per Day Support Services Costs



	1994	1995	1996	1997	1998	1999	2000	2001
Case Mix Payment - Some Quarters	$18.71	$20.83	$20.11	$21.07	$21.68	$21.96	$22.47	$23.37
Case Mix Payment - All Quarters	$15.22	$16.33	$16.40	$17.61	$18.16	$18.62	$19.42	$20.11
No Case Mix Payment	$18.82	$20.54	$20.33	$21.05	$21.15	$21.51	$23.56	$23.23

Chart 20:

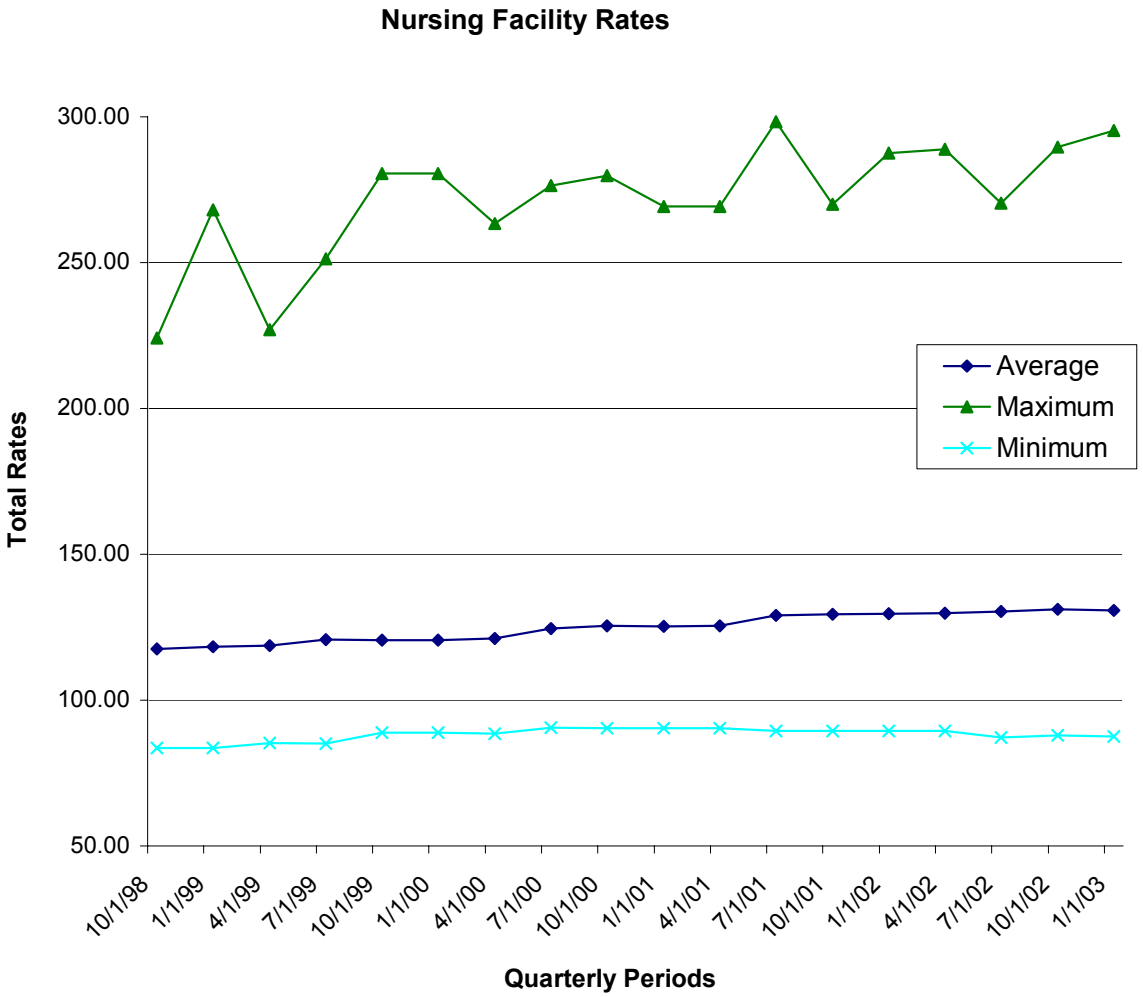


From 1994 until 2002, average per diem support costs have increased 25.3% or an average of approximately 3.6% per year. And since 1996, this increase very closely follows the trend line imposed on the graph.

VI. Rate History

Quarterly rates were collected and linked to the analyses database. An average rate was calculated for each quarter as well as obtaining the minimum rate and the maximum rate paid. This information is displayed graphically below.

Chart 21:

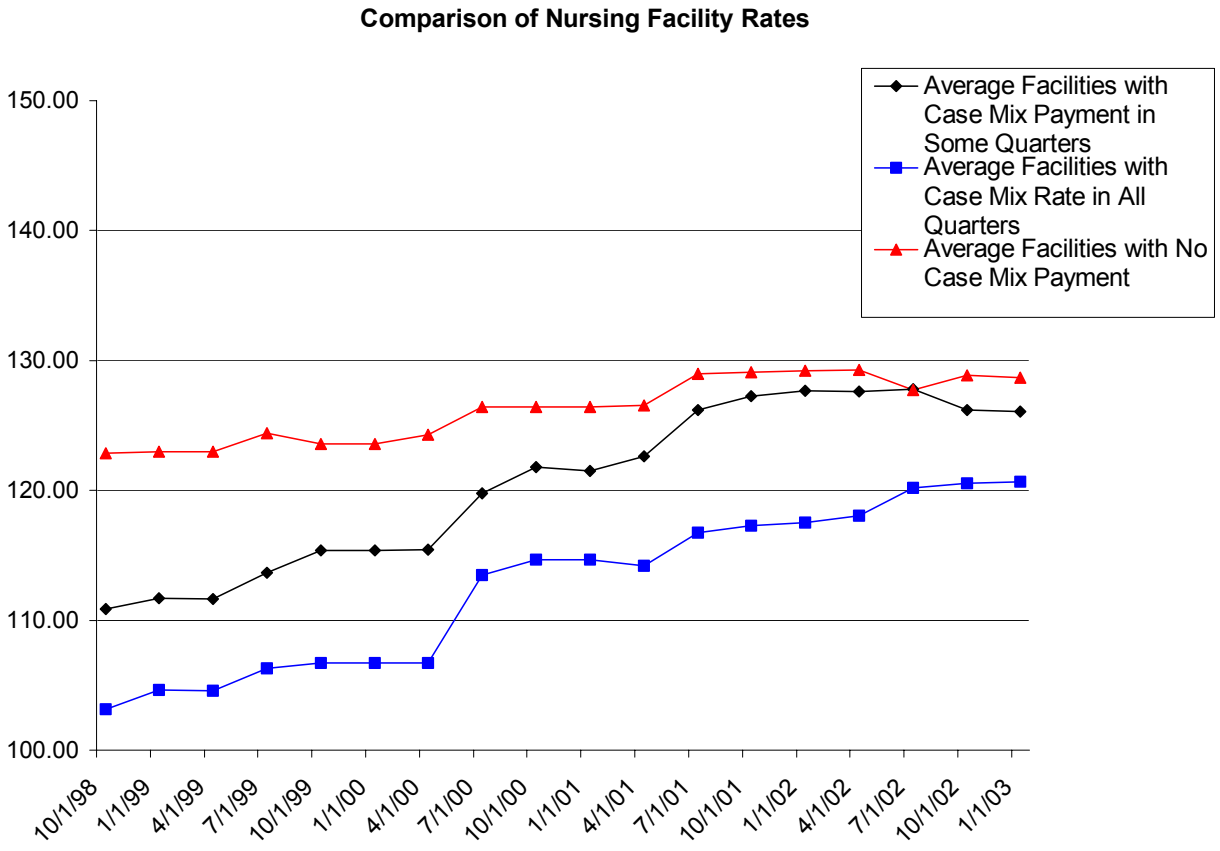


There is a significant amount of variability of rates at the high end, which could be expected. Facilities with the higher rates are typically hospital-based with fewer nursing facility beds and lower census and higher allocated costs.

With the higher rates and lower census any change in either creates quite a variance. The minimum rates and the average rates, however, are fairly consistent over time.

The following chart compares the average rate of facilities within the comparison subgroups. The prior chart was scaled to show both the maximum and minimum rates as well as the average rates. The following chart plots only the average rates and is scaled from $100 to $150 to better illustrate rate changes over time.

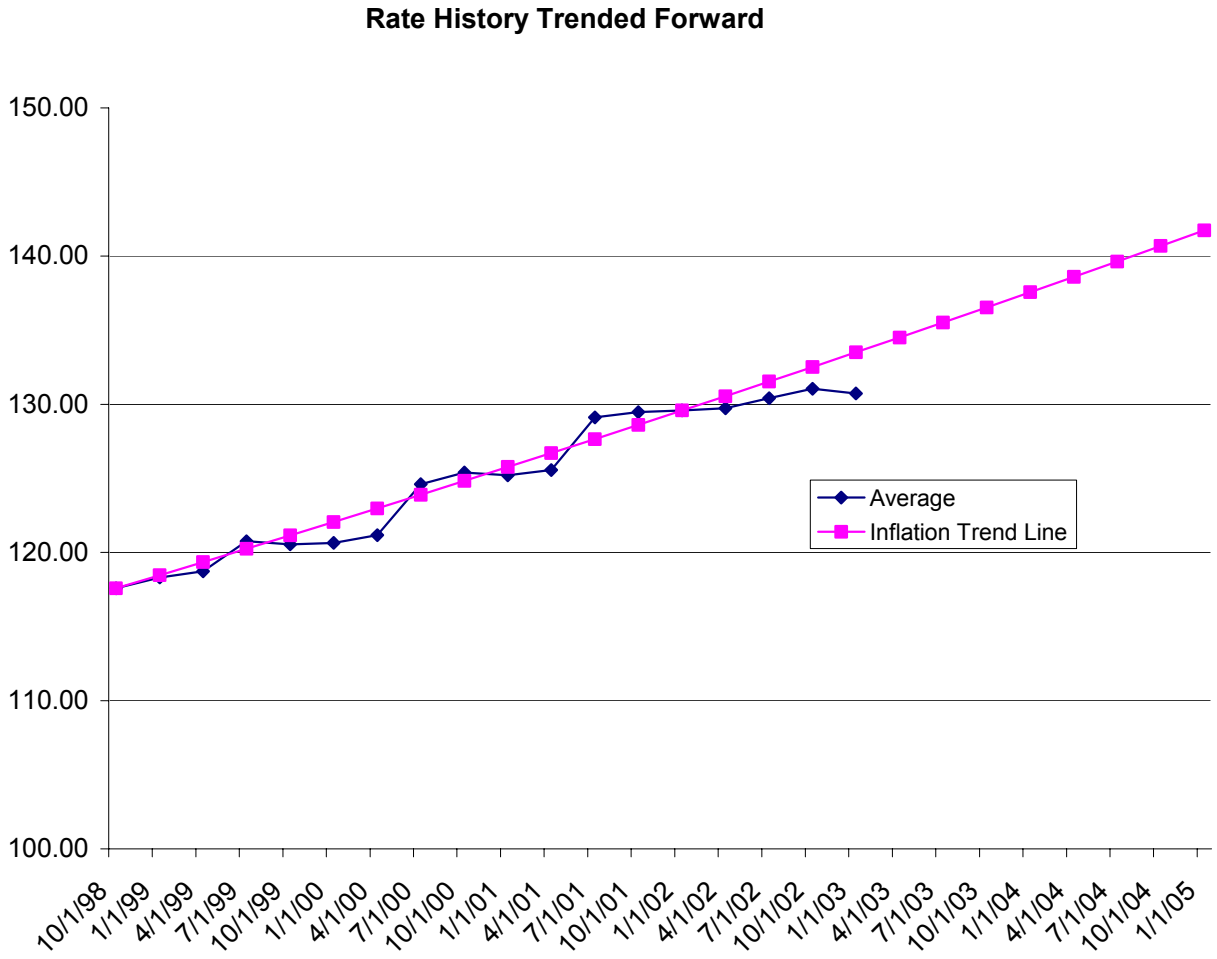
Chart 22:



Although the average rate is lower for facilities with consistent case mix rates, the groups follow a similar path of rate increases over time with the differences between average rates for the groups narrowing after 4/1/2000. It is also interesting that the average rates for the groups not receiving case mix

payment was less at 7/1/02 than the group with case mix in some quarters. This may be due in part to the variability of data in the second subgroup and will be evaluated further in the final report.

Chart 23:



Has the implementation of the case mix methodology slowed the rate of increase in average nursing facility rates? By looking at the trend line we see that increases in rates since 7/1/02 are below the 3% inflation trend line. Are there other factors to consider? A similar pattern occurred in average rates from 1/1/2000 to 10/1/2000 when most facilities were receiving rates under the hold harmless provision. We will add the additional quarters rate information on the final report to evaluate if this is normal variation in rate increases or an artifact of the new reimbursement methodology.

VII. Next Steps

Following the distribution of this interim report, we will complete the data collection needed for the final report. This includes:

- The 12/31/02 cost report data from the public disclosure diskette
- The follow-up interviews and facility survey on salary and staffing
- Updated quality measures and survey data to capture periods covered by the case mix payment method of payment
- Most currently available economic statistics and labor information

It is anticipated that all data collection will be completed no later that the end of August 2003.

New data will be appended to the common database and we will continue our efforts to match and link the data in an effort to potentially expand the analyses database and included some previously excluded facilities.

We will evaluate the most appropriate aggregation of facilities for comparison purposes to obtain the most meaningful analyses. After all the analyses are complete, we will produce the final report.

The final report, due October 1, 2003 will detail all data collection efforts, summarize the analyses performed, report our findings and include our conclusions and any recommendations.

VIII. Definitions

ADSA: The Aging and Disability Services Administration (ADSA) within DSHS is responsible for developing policies and managing a comprehensive system of long-term care services for disabled adults and older persons in the State of Washington.

Case Mix: A measure of the intensity of care and services used by a group of residents in a facility. The case refers to the overall data collected and used regarding an individual resident. The mix refers to an additive measure of the various profiles seen in a specific facility.

Case Mix Index (CMI): A numeric score with a specific range that identifies the relative resources used by a particular group of cases and represents the average resource consumption across a population or sample.

Case Mix Payment: The payment to a nursing facility, per resident or per facility, based on the facility's case mix.

CMS: The Centers for Medicare and Medicaid Services, formerly the Health Care Financing Administration, responsible for coordinating federal programs

Direct Care Costs: Expenses incurred by nursing facilities for the hands-on care of the resident. These costs may include salaries and fringe benefits of RNs, LPN, and nursing assistants.

Minimum Data Set (MDS): A screening assessment and care-planning tool that indicates strengths, needs and preferences of a nursing facility resident. It consists of core elements, common definitions and guidelines specified by CMS. It is one component of the Resident Assessment Instrument (RAI) as defined in the Nursing Home Reform Act of 1987, also referred to as OBRA'87.

Nursing Facility (NF): Nursing facility as defined in section 1919 (a) of the federal Social Security Act and regulations.

Resource Utilization Groups (RUG-III): A resident classification system that identifies the relative costs (resource use) of providing care for different types of residents in nursing facilities based on their resource use.

RUG grouper: Software that classifies residents into the resource utilization groups according to specific criteria as represented on the Minimum Data Set.

IX. Appendix

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1. Tables and Charts

1. Tables and Charts

2. Facilities Receiving Case Mix Payment Since Implementation

	Facility Name	Vendor ID
1	ALLIANCE LIVING COMMUNITY OF ANACORTES	4171401
2	BEVERLY HEALTH AND REHABILITATION CENTER	4180808
3	FIR LANE HEALTH AND REHABILITATION CENTER	4173506
4	FRANKLIN HILLS HEALTH AND REHABILITATION CENTER	4195202
5	GARDENS ON UNIVERSITY, THE	4194700
6	GRANDVIEW HEALTHCARE CENTER	4111183
7	ISLAND HEALTH AND REHABILITATION CENTER	4110110
8	JOSEPHINE SUNSET HOME	4114302
9	LIFE CARE CENTER OF KENNEWICK	4172102
10	LIFE CARE CENTER OF RITZVILLE	4172409
11	MEADOW GLADE MANOR	4111605
12	NORTH CENTRAL CARE CENTER	4111449
13	PACIFIC SPECIALTY AND REHABILITATIVE CARE	4110094
14	PARKWAY NURSING CENTER	4182002
15	PORT ORCHARD CARE CENTER	4111993
16	RENAISSANCE CARE CENTER	4198305
17	TEKOA CARE CENTER	4159703
18	WHITMAN HEALTH AND REHABILITATION CENTER	4112405

3. Facilities Receiving Case Mix Payment For Some But Not All Of The Quarters Since Implementation

	Facility Name	Vendor ID
1	ALDERCREST HEALTH AND REHABILITATION CENTER	4194403
2	ALDERWOOD MANOR	4111027
3	BAYVIEW MANOR	4146106
4	BEL AIR REHAB & SPECIALTY CARE	4112470
5	BELLINGHAM HEALTH CARE AND REHABILITATION SERVICES	4112488
6	BETHANY AT SILVER LAKE	4110490
7	BOOKER REST HOME ANNEX	4110466
8	BRANCH VILLA HEALTH CARE CENTER INC	4176004
9	BURTON CARE CENTER	4112934
10	CANTERBURY HOUSE	4112694
11	CAREAGE OF WHIDBEY	4110946
12	CASCADE VISTA CONVALESCENT CENTER, INC	4195400
13	CASHMERE CONVALESCENT CENTER	4167706
14	CENTRAL WASHINGTON HOSPITAL TRANSITIONAL CARE UNIT	4212593
15	CHENEY CARE CENTER	4173209
16	CHINOOK CONVALESCENT CENTER	4111274
17	CLARKSTON CARE CENTER	4111373
18	COLONIAL VISTA CARE	4113056
19	COLUMBIA BASIN HOSPITAL	4204509
20	COLUMBIA LUTHERAN HOME	4104808
21	COLVILLE TRIBAL CONVALESCENT CENTER	4176400
22	COULEE COMMUNITY HOSPITAL	4215018
23	CRESCENT CONVALESCENT CENTER	4147203
24	CRESTWOOD CONVALESCENT CENTER, INC	4111688
25	CRISTA SENIOR COMMUNITY	4127403

3. Facilities Receiving Case Mix Payment For Some But Not All Of The Quarters Since Implementation

26	DELTA REHABILITATION CENTER, INC	4154506
27	EMERALD CIRCLE CONVALESCENT CENTER	4175501
28	EVERGREEN AMERICANA HEALTH AND REHAB CENTER	4112231
29	EVERGREEN BREMERTON HEALTH & REHABILITATION CENTER	4113171
30	EVERGREEN MANOR HEALTH AND REHABILITATION CENTER	4112264
31	EVERGREEN NURSING AND REHABILITATION CENTER	4110086
32	FAIRFIELD GOOD SAMARITAN CENTER	4140109
33	FERRY COUNTY MEMORIAL HOSPITAL LTC UNIT	4211678
34	FIRST HILL CARE CENTER	4112504
35	FOREST RIDGE HEALTH AND REHABILITATION CENTER	4111589
36	FRANCISCAN HEALTH SYSTEM CARE CENTER AT BOTHELL	4112199
37	FRANCISCAN HEALTH SYSTEM CARE CENTER AT TACOMA	4112181
38	GARDEN TERRACE MANOR	4111852
39	GARFIELD COUNTY MEMORIAL HOSPITAL	4208203
40	GEORGIAN HOUSE	4112512
41	GRAYS HARBOR COMMUNITY HOSPITAL	4206306
42	HALLMARK MANOR	4110763
43	HARMONY HOUSE HEALTH CARE CENTER	4168803
44	HEARTHSTONE, THE	4152708
45	HEARTWOOD EXTENDED HEALTH CARE	4113080
46	HERITAGE GROVE	4112918
47	HERITAGE REHAB & SPECIALTY CARE	4112520
48	HIGHLAND CONVALESCENT CENTER	4111043
49	HIGHLAND TERRACE NURSING CENTER	4111597
50	HIGHLANDS DEMENTIA CARE CENTER, THE	4112546
51	HIGHLINE CARE CENTERS, LLC	4113064
52	HIGHLINE COMMUNITY HOSPITAL	4212601
53	HILLCREST MANOR	4111175
54	IDA CULVER HOUSE BROADVIEW NURSING CARE CENTER	4110656
55	ISLANDS' CONVALESCENT CENTER	4112322
56	JUDSON PARK HEALTH CENTER	4179701
57	KENNEY, THE	4124103
58	KITTITAS VALLEY HEALTH & REHABILITATION CENTER	4196903
59	LAKE VUE GARDENS CONVALESCENT CENTER	4111977
60	LIBERTY COUNTRY PLACE	4111381
61	LIFE CARE CENTER OF AUBURN	4111951
62	LIFE CARE CENTER OF BOTHELL	4111266
63	LIFE CARE CENTER OF FEDERAL WAY	4111076
64	LIFE CARE CENTER OF MOUNT VERNON	4111720
65	LIFE CARE CENTER OF PUYALLUP	4111761
66	LIFE CARE CENTER OF RICHLAND	4172201
67	LIFE CARE CENTER OF SKAGIT VALLEY	4111753
68	LIFE CARE CENTER OF WEST SEATTLE	4111910
69	LINCOLN HOSPITAL	4213708
70	LINDEN GROVE HEALTH CARE CENTER	4112579
71	LYNNWOOD MANOR HEALTH CARE CENTER	4187001
72	MANOR CARE HEALTH SERVICES	4183307
73	MANOR CARE HEALTH SERVICES (SPOKANE)	4187118
74	MANOR CARE OF GIG HARBOR	4111696
75	MARTHA & MARY HEALTH SERVICES	4112165

3. Facilities Receiving Case Mix Payment For Some But Not All Of The Quarters Since Implementation

76	MARYSVILLE CARE CENTER	4111985
77	MCKAY HEALTHCARE & REHAB CENTER	4186706
78	MERRY HAVEN HEALTH CARE CENTER, INC	4195103
79	MESSENGER HOUSE CARE CENTER	4186201
80	MIRA VISTA CARE CENTER	4195707
81	MORTON HOSPITAL LTCU	4217311
82	MOUNT SI TRANSITIONAL HEALTH CENTER	4111878
83	NEWPORT COMMUNITY HOSPITAL - LTC UNIT	4202115
84	NISQUALLY VALLEY CARE CENTER	4185807
85	NORTH AUBURN REHAB & HEALTH CENTER	4110045
86	NORTH VALLEY HOSPITAL	4210704
87	NORTHGATE REHABILITATION CENTER	4111167
88	OCEAN VIEW CONVALESCENT CENTER	4112082
89	ODESSA MEMORIAL HOSPITAL LTC UNIT	4208005
90	OLYMPIA MANOR	4111795
91	OLYMPIC CARE AND REHABILITATION CENTER	4112371
92	ORCHARD PARK	4112595
93	PALOUSE HILLS NURSING CENTER	4112959
94	PANORAMA CITY CONVALESCENT & REHAB CENTER	4150702
95	PARK RIDGE CARE CENTER	4112710
96	PARK WEST CARE CENTER INC	4112728
97	PARKSIDE HEALTHCARE, LLC	4113072
98	PARKSIDE NURSING CARE CENTER	4113106
99	PINEHURST PARK TERRACE	4111159
100	PROSSER MEMORIAL HOSPITAL	4204608
101	PROVIDENCE YAKIMA TRANSITIONAL CARE UNIT	4210233
102	PUGET SOUND HEALTHCARE CENTER	4110102
103	QUEEN ANNE HEALTHCARE	4112611
104	RAINIER VISTA CARE CENTER	4112629
105	REGENCY AT RENTON REHABILITATION CENTER	4111282
106	REGENCY MANOR	4111902
107	RENTON HIGHLANDS HEALTH & REHABILITATION CENTER	4112272
108	RIDGEMONT TERRACE INC	4158804
109	RIVERVIEW LUTHERAN CARE CENTER	4154407
110	ROO-LAN HEALTHCARE CENTER	4172904
111	ROSE VISTA NURSING CENTER	4113189
112	ROYAL PARK CARE CENTER	4111050
113	ROYAL VISTA CARE CENTER	4191003
114	SEATTLE KEIRO	4167904
115	SEATTLE MEDICAL AND REHABILITATION CENTER	4112280
116	SEHOME PARK CARE CENTER, INC	4112736
117	SELAH CONVALESCENT	4111084
118	SHARON CARE CENTER INC	4113049
119	SPOKANE VALLEY GOOD SAMARITAN VILLAGE	4143301
120	SPOKANE VETERAN'S HOME	4000121
121	ST FRANCIS EXTENDED HEALTH CARE	4112827
122	ST JOSEPH CARE CENTER	4112157
123	ST JOSEPH HOSPITAL OF CHEWELAH LTC	4219408
124	STAFHOLT GOOD SAMARITAN CENTER	4110664
125	SULLIVAN PARK CARE CENTER	4110698

3. Facilities Receiving Case Mix Payment For Some But Not All Of The Quarters Since Implementation

126	SUMMITVIEW HEALTHCARE CENTER	4135901
127	SUNBRIDGE CARE & REHAB FOR WALLA WALLA VALLEY	4110052
128	SUNBRIDGE CARE & REHABILITATION FOR CATHLAMET	4111399
129	SUNBRIDGE CARE & REHABILITATION FOR MOSES LAKE	4111514
130	SUNBRIDGE CARE & REHABILITATION FOR RICHMOND BEACH	4111431
131	SUNBRIDGE CARE & REHABILITATION FOR YAKIMA VALLEY	4110862
132	SUNBRIDGE SPECIAL CARE CENTER - LAKE RIDGE	4111522
133	SUNRISE VIEW CONVALESCENT CENTER	4111662
134	SUNSHINE GARDENS	4110508
135	SWEDISH MEDICAL CENTER / PROVIDENCE CAMPUS	4210035
136	SWEDISH MEDICAL CENTER BALLARD TCU	4213856
137	TACOMA LUTHERAN HOME	4160107
138	TACOMA REHAB & SPECIALTY CARE	4112637
139	TRI-STATE HEALTH AND REHABILITATION CENTER	4110748
140	VALLEY CARE CENTER	4112884
141	VALLEY MEDICAL CENTER TRANSITIONAL CARE UNIT	4215505
142	VASHON COMMUNITY CARE CENTER	4111811
143	WARM BEACH HEALTH CARE CENTER	4164505
144	WASHINGTON ODD FELLOWS HOME	4135109
145	WESLEY HOMES HEALTH CENTER	4110961
146	WHIDBEY ISLAND MANOR INC	4148102
147	WILLAPA HARBOR CARE CENTER	4177614
148	WOODLAND CONVALESCENT CENTER	4174900

4. Facilities Receiving Hold Harmless Rates Through To The Removal of the Provision

	Facility Name	Vendor ID
1	ALDERWOOD PARK CONVALESCENT CENTER	4111035
2	BELMONT TERRACE INC	4157509
3	BESSIE BURTON SULLIVAN	4110573
4	BEVERLY HEALTHCARE	4192803
5	BREMERTON HEALTH AND REHABILITATION CENTER	4111571
6	CARE CENTER AT KELSEY CREEK, THE	4111142
7	CAROLINE KLINE GALLAND HOME, THE	4165809
8	CORWIN CENTER AT EMERALD HEIGHTS	4111134
9	COWLITZ CARE CENTER	4112108
10	EDMONDS REHABILITATION AND HEALTHCARE CENTER	4112496
11	EVERGREEN CENTRALIA HEALTH AND REHAB CENTER	4112249
12	EVERGREEN VISTA CONVALESCENT CENTER, INC	4159802
13	FOREST VIEW TRANSITIONAL HEALTH CENTER	4111316
14	FORKS COMMUNITY HOSPITAL LTC UNIT	4205407
15	FOSS HOME AND VILLAGE	4141701
16	FRONTIER REHABILITATION AND EXTENDED CARE FACILITY	4112256
17	GRAYS HARBOR HEALTH & REHAB CENTER	4190302
18	HARMONY GARDENS CARE CENTER	4100608
19	HERITAGE HEALTH AND REHABILITATION CENTER	4112538
20	KAH TAI CARE CENTER	4111969

4. Facilities Receiving Hold Harmless Rates Through To The Removal of the Provision

21	LAKEWOOD HEALTH CARE CENTER	4112561
22	LIFE CARE CENTER OF BURIEN	4111746
23	MADELEINE VILLA HEALTH CARE CENTER, INC.	4150504
24	MERCER ISLAND CARE & REHABILITATION	4110847
25	MEYDENBAUER MEDICAL & REHABILITATION CENTER	4110078
26	MT BAKER CARE CENTER	4111860
27	NORSE HOME RETIREMENT CENTER	4141008
28	NORTHWEST CONTINUUM CARE CENTER	4112587
29	PARK ROYAL MEDICAL	4112090
30	PROVIDENCE MARIANWOOD	4111779
31	PROVIDENCE MOTHER JOSEPH CARE CENTER	4110672
32	PROVIDENCE MOUNT ST VINCENT	4107702
33	QUINCY VALLEY CONVALESCENT CENTER	4212908
34	REGENCY AT PUYALLUP REHABILITATION CENTER	4111233
35	REGENCY AT TACOMA REHABILITATION CENTER	4111225
36	REGENCY CARE CENTER AT MONROE	4111894
37	RIVERSIDE NURSING AND REHABILITATION CENTER	4197000
38	SUNBRIDGE CARE & REHABILITATION FOR VANCOUVER	4110870
39	UNIVERSITY PLACE CARE CENTER	4110987
40	VANCOUVER HEALTH AND REHABILITATION CENTER	4112652
41	WASHINGTON CENTER FOR COMPREHENSIVE REHABILITATION	4170601
42	WASHINGTON SOLDIERS HOME	4000014
43	WASHINGTON VETERANS HOME-RETSIL	4000006

5. Facilities Not Included in Analyses Database

	Facility Name	Vendor ID
1	ARDEN REHABILITATION AND HEALTHCARE CENTER	4112843
2	BAILEY-BOUSHAY HOUSE	4111068
3	BETHANY AT PACIFIC	4112900
4	BETHANY ON BROADWAY	4113601
5	BEVERLY HEALTH & REHAB CENTER AT NORTHPOINTE	4111837
6	BEVERLY HEALTH & REHABILITATION OF FEDERAL WAY	4113296
7	BUENA VISTA, INC	4112447
8	CANYON LAKES RESTORATIVE AND REHABILITATION CENTER	4112413
9	CASCADE PARK CARE CENTER	4111639
10	CHRISTIAN HEALTH CARE CENTER	4139408
11	CLEARVIEW MANOR HEALTH AND REHAB CENTER	4193207
12	COLUMBIA VIEW CARE CENTER	4113320
13	CORDATA HEALTHCARE & REHABILITATION CENTER	4113023
14	COTTESMORE OF LIFE CARE	4111845
15	COVENANT SHORES HEALTH CENTER	4112314
16	CRISTA SHORES NURSING CARE CENTER	4111712
17	EASTSIDE MEDICAL & REHABILITATION CENTER	4112223
18	EVERETT REHABILITATION & CARE CENTER	4111647
19	EVERETT TRANSITIONAL CARE SERVICES	4112454
20	EVERGREEN ENUMCLAW HEALTH & REHABILITATION CENTER	4112660
21	EVERGREEN HOSPITAL MEDICAL CENTER TCC	4213864

5. Facilities Not Included in Analyses Database

22	EVERGREEN SHELTON HEALTH & REHABILITATION CENTER	4113247
23	EVERGREEN WALLA WALLA HEALTHCARE & REHAB CENTER	4112678
24	EXETER HOUSE	4160206
25	FORT VANCOUVER CONVALESCENT CENTER	4112785
26	GARDEN VILLAGE	4113163
27	GOOD SAMARITAN HEALTH CARE CENTER	4111936
28	GOOD SAMARITAN HEALTH CARE CENTER	4112975
29	GREENWOOD PARK CARE CENTER INC	4181400
30	HERITAGE GARDENS CARE CENTER	4111472
31	HIGHLINE CARE CENTER	4180501
32	HIGHLINE CONVALESCENT CENTER	4165403
33	INTEGRATED HEALTH SERVICES OF SEATTLE	4110482
34	ISSAQUAH CARE CENTER	4112553
35	JEFFERSON HOUSE CARE CENTER	4186003
36	KIN ON HEALTH CARE CENTER	4112215
37	LANDMARK CARE CENTER	4112991
38	LOGANHURST HEALTH CARE	4110821
39	MAGNOLIA HEALTH CARE CENTER	4111191
40	MANOR CARE HEALTH SERVICES (LYNNWOOD)	4109567
41	MASONIC RETIREMENT CENTER OF WASHINGTON	4127213
42	MEADOWBROOK EXTENDED CARE CENTER, THE	4111787
43	MEMORIAL HOSPITAL'S GARDEN VILLAGE	4112421
44	MIRA VISTA REHAB CENTER- UNITED GENERAL HOSP CAMP	4112777
45	MISSION GOOD SAMARITAN	4112173
46	MISSION HEALTHCARE AT BELLEVUE	4113197
47	MONARCH CARE CENTER	4191300
48	MT ADAMS CARE CENTER	4112389
49	OREGON-WASHINGTON PYTHIAN HOME	4155107
50	PACIFIC CARE CENTER	4112439
51	PARK MANOR REHABILITATION CENTER	4112603
52	PARK ROSE CARE CENTER	4112983
53	PARK ROSE CARE CENTER INC	4112744
54	PARK SHORE	4111670
55	PARKSIDE CARE CENTER	4137402
56	PARKWAY NORTH CARE CENTER	4112298
57	PINECREST MANOR CONVALESCENT HOME	4153409
58	PINEWOOD TERRACE NURSING CENTER	4189502
59	PORT ANGELES CARE CENTER	4112397
60	PROVIDENCE CENTRALIA HOSPITAL	4211918
61	PROVIDENCE SEATTLE MEDICAL CENTER	4200036
62	REED HILL CONVALESCENT & REHABILITATION CENTER	4112769
63	REGENCY AT NORTHPOINTE	4112355
64	REGENCY AT THE PARK	4112850
65	REGENCY CARE CENTER AT ARLINGTON	4111886
66	REGENCY CARE CENTER OF WALLA WALLA	4181905
67	ROCKWOOD AT HAWTHORNE	4112835
68	ROYAL PARK CARE CENTER, LLC	4113270
69	SAN JUAN REHABILITATION AND CARE CENTER	4112926
70	SAN JUAN REHABILITATION AND CARE CENTER	4113130
71	SEA MAR COMMUNITY CARE CENTER	4111613
72	SEATOMA CONVALESCENT CENTER	4144101
73	SEQUIM NURSING CENTER INC	4101507

5. Facilities Not Included in Analyses Database

74	SHERWOOD MANOR	4112363
75	SHUKSAN HEALTHCARE CENTER	4112942
76	SHUKSAN HEALTHCARE CENTER	4113148
77	SOUTHCREST SUBACUTE & SPECIALTY CARE CENTER	4182705
78	ST LUKE'S EXTENDED CARE CENTER	4195301
79	ST MARY MEDICAL CENTER TCU	4212015
80	SUNBRIDGE CARE & REHABILITATION - BAYSIDE	4110813
81	SUNBRIDGE CARE & REHABILITATION - SHUKSAN	4111480
82	SUNBRIDGE CARE & REHABILITATION FOR ANACORTES	4110649
83	SUNBRIDGE CARE & REHABILITATION FOR BURLINGTON	4110631
84	SUNBRIDGE CARE & REHABILITATION FOR MONTESANO	4112686
85	SUNBRIDGE CARE & REHABILITATION FOR SHELTON	4112876
86	SUNBRIDGE CARE & REHABILITATION OF OYSTER BAY	4111407
87	SUNRISE CARE & REHABILITATION FOR SHELTON	4112801
88	TALBOT CENTER FOR REHABILITATION AND HEALTHCARE	4112645
89	WALNUT GROVE NURSING HOME	4111357
90	WEDGWOOD REHABILITATION CENTER	4111290
91	YAKIMA CONVALESCENT CENTER	4111654

All facilities excluded, except Bailey Boushay did not have complete cost data in all periods evaluated. Bailey Boushay was excluded as an atypical facility.

6. Employment Statistics

Employment and Wage Estimates 2001 - Healthcare Practitioners and Technical Occupations

Area	Occupational Title	Estimate Employment	% Increased Employment	Average Wage	25th Percentile
Washington – Statewide	Healthcare Practitioners and Technical	119,800	2.61%	$57,396	$37,848
				$27.59	$18.19
	Licensed Practical and Vocational Nurses	10,0400	4.23%	$33,835	$30,017
				$16.27	$14.43
Rural East	Healthcare Practitioners and Technical	7,160	7.51%	$48,196	$33,598
				$23.17	$16.15
	Licensed Practical and Vocational Nurses	750	14.39%	$30,896	$27,708
				$14.85	$13.32
Rural West	Healthcare Practitioners and Technical	8,270	9.81%	$53,257	$34,038
				$25.60	$16.37
	Licensed Practical and Vocational Nurses	940	10.62%	$32,556	$29,310
				$15.65	$14.09
Bremerton MSA	Healthcare Practitioners and Technical	3,150	4.60%	$53,195	$35,459
				$25.57	$17.05
	Licensed Practical and Vocational Nurses	380	22.99%	$33,934	$31,224
				$16.32	$15.01

Area	Occupational Title	Estimate Employment	% Increased Employment	Average Wage	25th Percentile
Bellingham MSA	Healthcare Practitioners and Technical	2,620	32.28%	$51,169	$33,355
				$24.60	$16.03
	Licensed Practical and Vocational Nurses	320	22.75%	$30,806	$27,314
				$14.81	$13.14
Olympia MSA	Healthcare Practitioners and Technical	4,090	4.16%	$55,714	$36,904
				$26.79	$17.74
	Licensed Practical and Vocational Nurses	400	17.69%	$30,975	$26,905
				$14.89	$12.93
Portland Vancouver MSA	Healthcare Practitioners and Technical	5,180	25.15%	$54,817	$36,190
				$26.35	$17.40
	Licensed Practical and Vocational Nurses	250	13.60%	$34,347	$30,937
				$16.52	$14.87
Richland Kennewick Pasco MSA	Healthcare Practitioners and Technical	3,070	13.19%	$52,543	$35,846
				$25.26	$17.23
	Licensed Practical and Vocational Nurses	230	31.10%	$30,736	$26,837
				$14.78	$12.90
Seattle Bellevue Everett MSA	Healthcare Practitioners and Technical	56,750	3.80%	$61,307	$41,710
				$29.47	$20.05
	Licensed Practical and Vocational Nurses	3,040	10.73%	$35,434	$31,465

Area	Occupational Title	Estimate Employment	% Increased Employment	Average Wage	25th Percentile
				$17.03	$15.12
Spokane MSA	Healthcare Practitioners and Technical	12,860	8.83%	$56,540	$36,215
				$27.18	$17.42
	Licensed Practical and Vocational Nurses	1,180	6.98%	$34,392	$30,052
				$16.54	$14.45
Tacoma MSA	Healthcare Practitioners and Technical	12,760	3.81%	$55,845	$35,011
				$26.85	$16.83
	Licensed Practical and Vocational Nurses	2,010	5.33%	$34,479	$30,940
				$16.58	$14.87
Yakima MSA	Healthcare Practitioners and Technical	3,850	3.81%	$50,654	$34,778
				$24.35	$16.72
	Licensed Practical and Vocational Nurses	540	18.18%	$32,446	$28,714
				$15.60	$13.80

Employment and Wage Estimates 2001 - Healthcare Support Occupations

Area	Occupational Title	Estimate Employment	% Increased Employment	Average Wage	25th Percentile
Washington – Statewide	All Healthcare Support Occupations	62,680	2.35%	$24,867	$19,317
				$11.95	$9.28
	Nursing Aides, Orderlies, and Attendants	19,420	2.83%	$21,768	$18,555
				$10.46	$8.92
Rural East	All Healthcare Support Occupations	4,770	6.68%	$21,679	$17,297
				$10.42	$8.32
	Nursing Aides, Orderlies, and Attendants	1,950	5.83%	$18,823	$16,558
				$9.05	$7.96
Rural West	All Healthcare Support Occupations	5,080	6.65%	$21,783	$16,947
				$10.47	$8.15
	Nursing Aides, Orderlies, and Attendants	1,750	7.42%	$19,096	$16,059
				$9.18	$7.72
Bremerton MSA	All Healthcare Support Occupations	2,270	7.43%	$23,704	$18,559
				$11.39	$8.92
	Nursing Aides, Orderlies, and Attendants	1,050	13.85%	$21,660	$18,170
				$10.41	$8.74

Area	Occupational Title	Estimate Employment	% Increased Employment	Average Wage	25th Percentile
Bellingham MSA	All Healthcare Support Occupations	1,520	13.03%	$22,435	$17,391
				$10.79	$8.36
	Nursing Aides, Orderlies, and Attendants	460	23.20%	$18,704	$16,518
				$8.99	$7.94
Olympia MSA	All Healthcare Support Occupations	1,820	7.68%	$24,459	$18,688
				$11.76	$8.99
	Nursing Aides, Orderlies, and Attendants	700	14.94%	$20,889	$17,172
				$10.04	$8.26
Portland Vancouver MSA	All Healthcare Support Occupations	3,180	11.92%	$23,609	$19,208
				$11.35	$9.23
	Nursing Aides, Orderlies, and Attendants	790	16.74%	$22,536	$20,008
				$10.84	$9.62
Richland Kennewick Pasco MSA	All Healthcare Support Occupations	1,400	9.69%	$22,653	$17,965
				$10.89	$8.63
	Nursing Aides, Orderlies, and Attendants	230	17.32%	$20,878	$18,898
				$10.03	$9.08
Seattle Bellevue Everett MSA	All Healthcare Support Occupations	26,870	4.32%	$27,123	$21,433
				$13.04	$10.31
	Nursing Aides, Orderlies, and Attendants	7,340	5.72%	$24,204	$21,419

Area	Occupational Title	Estimate Employment	% Increased Employment	Average Wage	25th Percentile
				$11.64	$10.30
Spokane MSA	All Healthcare Support Occupations	6,720	6.00%	$23,898	$18,401
				$11.49	$8.85
	Nursing Aides, Orderlies, and Attendants	2,100	6.36%	$20,209	$18,018
				$9.72	$8.66
Tacoma MSA	All Healthcare Support Occupations	6,400	6.46%	$24,965	$19,831
				$12.00	$9.54
	Nursing Aides, Orderlies, and Attendants	1,970	5.42%	$22,016	$18,883
				$10.58	$9.08
Yakima MSA	All Healthcare Support Occupations	2,610	5.80%	$21,071	$17,147
				$10.13	$8.25
	Nursing Aides, Orderlies, and Attendants	1,070	5.11%	$19,032	$16,670
				$9.15	$8.02

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